As filed with the Securities and Exchange Commission on February 28, 2020.

Registration Statement No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PULMONX CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	3841	77-0424412
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

700 Chesapeake Drive
Redwood City, California 94063
1-650-364-0400
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Glendon E. French
Chief Executive Officer
Pulmonx Corporation
700 Chesapeake Drive
Redwood City, California 94063
1-650-364-0400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mark B. Weeks Seth J. Gottlieb Sepideh Mousakhani Cooley LLP 3175 Hanover Street Palo Alto, California 94304 (650) 843-5000	Derrick Sung, Ph.D. Chief Financial Officer Pulmonx Corporation 700 Chesapeake Drive Redwood City, California 94063 (650) 364-0400	Ilir Mujalovic Shearman & Sterling LLP 599 Lexington Avenue New York, New York 10022 (212) 848-4000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☒

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Proposed Maximum Aggregate Offering Price[(1)(2)]	Amount of Registration Fee
Common Stock, $0.001 par value per share	$86,250,000	$11,196

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes the aggregate offering price of additional shares that the underwriters have the option to purchase.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion
Preliminary Prospectus dated February 28, 2020

PROSPECTUS

Shares

Pulmonx Corporation

Common Stock

This is Pulmonx Corporation's initial public offering. We are selling shares of our common stock.

We expect the public offering price to be between $ and $ per share. Currently, no public market exists for the shares of our common stock. We have applied to list our common stock on the Nasdaq Global Market under the symbol "LUNG."

We are an "emerging growth company" and a "smaller reporting company" as defined under the U.S. federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company."

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 12 of this prospectus.

	Per Share	Total
Public offering price	$	$
Underwriting discount(1)	$	$
Proceeds, before expenses, to us	$	$

(1) See "Underwriting" beginning on page 184 for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional shares of common stock from us, at the initial public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares of common stock will be ready for delivery on or about , 2020.

BofA Securities **Morgan Stanley**

Stifel **Wells Fargo Securities** **Canaccord Genuity**

The date of this prospectus is , 2020

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We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares of common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering, or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights, and is qualified in its entirety by, the more detailed information and financial statements included elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, including the sections titled "Risk Factors," "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making an investment decision.

Unless the context otherwise requires, the terms "Pulmonx," "the company," "we," "us," "our" or similar terms in this prospectus refer to Pulmonx Corporation and its consolidated subsidiaries.

Overview

We are a commercial-stage medical technology company that provides a minimally invasive treatment for patients with severe emphysema, a form of chronic obstructive pulmonary disease (COPD). Our solution, which is comprised of the Zephyr Endobronchial Valve (Zephyr Valve), the Chartis Pulmonary Assessment System (Chartis System) and the StratX Lung Analysis Platform (StratX Platform), is designed to treat severe emphysema patients who, despite medical management, are still profoundly symptomatic and either do not want or are ineligible for surgical approaches. We estimate our solution currently addresses approximately 500,000 patients in the United States and 700,000 patients in select international markets, which represents a global market opportunity of approximately $12 billion.

We have a compelling body of clinical evidence with over 100 scientific articles published regarding the clinical benefits of Zephyr Valves, including in *The New England Journal of Medicine*, *The Lancet* and the *American Journal of Respiratory and Critical Care Medicine*. Multiple randomized controlled clinical trials have demonstrated that patients selected with the Chartis System and successfully treated with Zephyr Valves have shown statistically and clinically significant improvements in lung function, exercise capacity and quality of life compared to medical management alone.

In June 2018, we received pre-market approval (PMA) by the U.S. Food and Drug Administration (FDA) as a result of our breakthrough technology designation. The Zephyr Valve is now commercially available in more than 25 countries, with over 76,000 valves used to treat more than 19,000 patients through December 31, 2019. We have established reimbursement in major markets in North America, Europe and Asia Pacific and the Zephyr Valve has been included in treatment guidelines for COPD worldwide.

COPD and Emphysema: A Prevalent Disease with High Unmet Medical Needs

COPD refers to a group of lung diseases characterized by obstruction of airflow that interferes with normal breathing. In 2015, it affected approximately 175 million patients and was responsible for 3.2 million deaths globally. In the United States, COPD is the third leading cause of death and affected approximately 16 million Americans as of 2013. COPD is expected to be associated with approximately $49 billion in direct medical costs in 2020. Emphysema, a form of COPD, which accounts for approximately 25% of all COPD patients, is a debilitating and life-threatening disease that progressively destroys lung tissue, resulting in a diminishing ability to breathe and engage in the most basic daily activities, leading to a high mortality rate. The lung damage caused by emphysema is irreversible. As of 2018, approximately 3.8 million patients in the United States were diagnosed with emphysema, of which roughly 1.5 million have severe emphysema. Of these 1.5 million severe emphysema patients, we estimate that approximately 500,000 patients would qualify for treatment with our Zephyr Valves, and an additional number may be able to be treated in the future with other technologies under development by us if successfully developed and approved.

There are several treatment options for patients with emphysema, depending on the level of severity of the disease, ranging from medical management to more invasive surgical options. However, these treatment options have significant limitations for patients with severe emphysema. Initial treatment for emphysema is generally limited to

medications that primarily target airway obstruction and reduce inflammation, but do not address the underlying lung tissue destruction.

As the disease worsens, symptoms increase despite optimized drug therapy, pulmonary rehabilitation exercises and supplemental oxygen. Many patients become increasingly unable to engage in the most basic daily activities as a result of the persistent feeling of breathlessness and this reduces their overall health status each year. At this point, physicians may refer patients to thoracic surgeons for single or double lung transplantation, or for lung volume reduction surgery (LVRS), in which hyperinflated tissue is cut away and removed. These invasive surgical procedures involve substantial risk of complications, prolonged hospital stays and high mortality. In addition, many patients do not qualify for these procedures. We believe there is both an urgent clinical need and a strong market opportunity for a solution that is safe, effective and minimally invasive.

Our Solution

Our solution, which is comprised of the Zephyr Valve, Chartis System and StratX Platform, is designed to address the need for a more effective, minimally invasive treatment option for patients with severe emphysema, offering bronchoscopic lung volume reduction without surgery and its associated risks. It is used to treat patients who, despite medical management, are still profoundly symptomatic and either do not want or are ineligible for surgical approaches.

Zephyr Valves are indicated for bronchoscopic treatment of adult patients with hyperinflation associated with severe emphysema in regions of the lung that have little to no collateral ventilation. During the one-time bronchoscopic procedure, Zephyr Valves are placed in the airways to occlude the most diseased parts of the lung, allowing trapped air to escape until the lobe is reduced in size. The intended result is a reduction in lung volume and hyperinflation in the targeted lobe, allowing healthier parts of the lung to expand and take in more air. Patients who are successfully treated with the Zephyr Valve report improved breathing and the ability to go back to doing everyday tasks more easily. When combined with the Chartis System for informed patient selection and treatment planning, Zephyr Valves have been shown to have successful procedure rates of 84-90% in clinical trials.

We believe our solution provides the following important benefits:

- **Significant, durable improvements in lung function, exercise capacity and quality of life**, demonstrated in a substantial body of clinical data;
- **Well-characterized safety profile**, evidenced by the inclusion in global treatment recommendations and over 19,000 patients treated globally with the Zephyr Valve;
- **High procedural success** driven by innovative and effective patient assessment tools; and
- **Minimally invasive procedure** typically lasting less than an hour.

Over 100 scientific articles have been published regarding the clinical benefits of Zephyr Valves, including multiple meta-analyses, review articles, cost-effectiveness analyses and risk-benefit analyses. The Zephyr Valve showed statistically significant improvements in lung function, exercise capacity and quality of life when compared to medical management alone in multiple randomized controlled clinical trials. Additionally, independent studies have demonstrated that Zephyr Valves deliver increases in the BODE Index (a multi-dimensional health status scoring system for patients with COPD) that have been associated with survival benefits.

The LIBERATE study, our pivotal study published in 2018, was a multicenter, multinational, randomized controlled clinical trial of Zephyr Valves that included 190 patients with severe emphysema and little to no collateral ventilation. All primary and secondary endpoints were statistically significant, including the proportion of patients achieving a clinically significant improvement in lung function as well as the mean improvements in exercise capacity, hyperinflation and quality of life. These outcomes were the result of a high rate of procedural success, with 84% of patients achieving a clinically meaningful reduction in treated lobe volume.

Our Success Factors

We believe the continued growth of our company will be driven by the following success factors:

- ***Innovative, minimally invasive treatment paired with proprietary patient selection technology.*** We have developed the first FDA-approved implant, the Zephyr Valve, to reduce hyperinflation associated with severe emphysema, which received a breakthrough technology designation and pre-market approval. To enhance optimal outcomes with the Zephyr Valve, the Chartis System and the StratX Platform are designed to help physicians identify and treat those patients most likely to benefit from treatment with Zephyr Valves. We believe the combination of our innovative valve treatment and patient assessment tools represents a significant competitive advantage and our goal is to establish our solution as a standard of care for severe emphysema.

- ***Addressing a large underserved market.*** We are addressing a large underserved market for patients with severe emphysema whose treatment options are limited. We believe our solution currently addresses approximately 500,000 patients in the United States and 700,000 patients in select international markets who have severe emphysema with hyperinflation and limited to no collateral ventilation, representing an approximately $12 billion global market opportunity. We have established significant momentum in addressing this market with our broad global commercial footprint across more than 25 countries and with a track record of more than 19,000 patients treated. Additionally, we have ongoing research and development efforts to further expand the addressable market of our products.

- ***Compelling body of clinical evidence and inclusion in COPD guidance documents.*** The safety, effectiveness and clinical advantages of Zephyr Valves have been demonstrated in multiple randomized controlled clinical trials. The quality of evidence for treatment with endobronchial valves has been graded “A” by the Global Initiative for Chronic Obstructive Lung Disease (GOLD), and the United Kingdom’s National Institute for Health and Care Excellence (NICE) has included this treatment as part of standard measures for COPD and recommended all qualifying patients be evaluated for eligibility.

- ***Favorable coverage and established reimbursement.*** In the United States, our solution is reimbursed based on established Category I Current Procedural Terminology (CPT) and ICD-10 Procedure Coding System (PCS) codes and associated MS-DRG and APC payment groupings. Current reimbursement in the United States is generally sufficient to cover the hospital costs of the procedure and related inpatient care. Commercial payors, such as Aetna and Humana, have issued positive coverage policies for the Zephyr Valve, and United Healthcare no longer considers the procedure unproven or experimental. Medicare covers our solution for patients when medically necessary, and other commercial insurers are approving pre-authorization requests on a case-by-case basis. We estimate that roughly 75% of the potential Zephyr Valve patient population are Medicare/Medicaid beneficiaries, of which approximately 25% have managed Medicare/Medicaid and the remaining 50% have traditional Medicare/Medicaid. Approximately 25% of the potential Zephyr Valve patient population is under third-party commercial payor policies. Outside the United States, our solution is covered by major health systems across much of Europe, Australia and South Korea.

- ***Comprehensive approach to market development and patient engagement****.* We have established a stepwise approach to market development across three key stakeholders in severe emphysema treatment: hospitals, physicians and patients. Our commercial organization is focused on working with pulmonary physicians and their hospitals to build emphysema centers of excellence where physicians are instructed in the workup of advanced COPD and perform bronchoscopic lung volume reduction using our solution. Our team works closely with all members of the hospital care team to help these centers efficiently incorporate our solution as a new service line. In addition, we are partnering with these centers to build awareness and referrals from primary care and other physicians who may be managing severe emphysema patients in the community. We build upon this approach with direct-to-patient marketing initiatives that help educate patients on the Zephyr Valve procedure and where it is available. We believe

that this comprehensive approach to engagement across multiple constituents will help to increase awareness of and demand for our solution.

- ***Robust intellectual property portfolio.*** We own intellectual property that covers the Zephyr Valve and Chartis System. As of December 31, 2019, we held 37 U.S. patents and 82 international patents that include device, apparatus and method claims. In addition, we believe that our trade secrets, including manufacturing know-how, provide additional barriers to entry.

Our Growth Strategy

Our vision is to be a global leader in treating advanced lung disease and to have a transformational impact on the lives of patients. Our goal is to establish our solutions as the standard of care for the assessment and treatment of patients with severe COPD.

Key elements of our strategy to achieve this vision include:

- ***Expanding our commercial organization in the United States to drive adoption of Zephyr Valves.*** As of December 31, 2019, we sold Zephyr Valves to more than 80 hospitals and had 32 sales territory managers in the United States. We plan to expand our commercial organization by recruiting and training talented sales territory managers in existing and new markets in the United States to help facilitate further adoption and broaden awareness of Zephyr Valves primarily among the approximately 800 pulmonologists performing interventional pulmonary procedures across approximately 500 high volume hospitals.

- ***Collaborating with hospitals to address unmet patient needs.*** Our strategy is to identify regions with high unmet need, identify leading hospitals and work with champions of our solution to build emphysema centers of excellence.

- ***Promoting awareness among patients, physicians and other healthcare providers.*** We intend to continue to promote awareness of our solution through training and educating patients, physicians, pulmonary rehabilitation centers, key opinion leaders and various medical societies on the proven clinical benefits of Zephyr Valves. In addition, we intend to continue to publish additional clinical data in various industry and scientific journals and online and to present at various industry conferences.

- ***Continuing to invest in research and development to foster innovation and expand our addressable market.*** We intend to continue investing in existing and next generation technologies to address the needs of patients with severe COPD.

- ***Expanding in existing and new international markets.*** We have established a leading international sales force in interventional pulmonology. We intend to continue expanding our team and seeking additional international regulatory clearances in order to more fully penetrate this global opportunity.

- ***Driving profitability by scaling our business operations to achieve cost and production efficiencies.*** We plan to drive profitability and gross margin expansion by leveraging our manufacturing capacity to scale production volume, improve efficiencies and lower costs as we increase supply to meet the anticipated growing demands for our products.

We generated revenue of $32.6 million, with a gross margin of 68.8% and a net loss of $20.7 million, for the year ended December 31, 2019 compared to revenue of $20.0 million, with a gross margin of 61.4% and a net loss of $18.5 million, for the year ended December 31, 2018. As of December 31, 2019, we had an accumulated deficit of $210.5 million. We currently generate most of our revenue from the sales of Zephyr Valves and delivery catheters. We also generate a smaller amount of our revenue from our Chartis System, which is comprised of sales of the balloon catheters, usage fees and sales of the Chartis console. The StratX Platform, while used to identify patients eligible for treatment with Zephyr Valves, does not independently generate any revenue for us.

Risk Factors

Our business is subject to numerous risks and uncertainties that you should be aware of before making an investment decision. You should carefully consider all of the information set forth in this prospectus and, in particular, should evaluate the specific factors set forth in the section titled “Risk Factors” immediately following this prospectus summary in deciding whether to invest in our common stock. These risks include, among others, the following:

- We have a history of significant net losses, which we expect to continue, and we may not be able to achieve or sustain profitability in the future;
- We have limited experience marketing and selling our solution;
- We currently rely on a single product, the Zephyr Valve, which can only be marketed for limited indications, and if we are not successful in commercializing the Zephyr Valve, our business, financial condition and results of operations will be negatively affected;
- Our business is dependent on hospital, physician and patient adoption of our solution as a treatment for severe emphysema. If hospitals, physicians or patients are unwilling to change current practices to adopt our solution, it will negatively affect our business, financial condition and results of operations;
- If we fail to receive access to hospital facilities, our sales may decrease;
- Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations;
- If we are unable to achieve and maintain adequate levels of coverage or reimbursement for our solution, or any future products we may seek to commercialize, or if patients are left with significant out-of-pocket costs, our commercial success may be severely hindered;
- If we fail to retain marketing and sales personnel and, as we grow, fail to increase our marketing and sales capabilities or develop broad awareness of our solution in a cost-effective manner, we may not be able to generate revenue growth;
- We have limited long-term data regarding the safety and effectiveness of our solution, including the Zephyr Valve. The only safety and effectiveness data of our solution, including the Zephyr Valve, is limited to one year following placement and we are required to conduct extension studies to follow up on safety and effectiveness out to five years;
- We have limited experience manufacturing our products in significant commercial quantities and we face manufacturing risks that may adversely affect our ability to manufacture our products, reduce our gross margins and negatively affect our business, financial condition and results of operations;
- Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide;
- The sizes of the markets for our current and future products have not been established with precision and may be smaller than we estimate and may decline. Certain patients may not have regions of the lung with little to no collateral ventilation, making them poor candidates for the Zephyr Valve. In addition, if the overall rate of smokers continues to decline, this may eventually decrease the number of patients suffering from COPD and emphysema and, accordingly, who would benefit from our solution;

- We expect to continue to incur net losses for the next several years and we expect to require substantial additional capital beyond the proceeds of this offering to finance our planned operations, which may include future equity and debt financings. This additional capital may not be available to us on acceptable terms or at all. Our failure to obtain additional financing when needed on acceptable terms, or at all, could force us to delay, limit, reduce or eliminate our commercialization, sales and marketing efforts, product development programs or other operations;

- Our history of recurring losses and anticipated expenditures raise substantial doubts about our ability to continue as a going concern. Our ability to continue as a going concern requires that we obtain sufficient funding to finance our operations;

- Our products and operations are subject to extensive government regulation and oversight both in the United States and abroad. If we fail to obtain and maintain necessary regulatory approvals for the Zephyr Valve and related products, or if approvals for future products and indications are delayed or not issued, it will negatively affect our business, financial condition and results of operations; and

- We may become a party to intellectual property litigation or administrative proceedings that could be costly and could interfere with our ability to sell and market our products.

If we are unable to adequately address these and other risks we face, our business may be harmed.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act) and therefore we intend to take advantage of certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act), reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer qualify as an "emerging growth company," whichever is earlier. In addition, the JOBS Act provides that an "emerging growth company" can delay adopting new or revised accounting standards until those standards apply to private companies. We have not elected to use this extended transition period under the JOBS Act, and, therefore, we will be subject to the same accounting standards as other public companies that are not "emerging growth companies."

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (Exchange Act). We may continue to be a smaller reporting company even after we are no longer an "emerging growth company." We may take advantage of certain of reduced disclosures available to smaller reporting companies and will be able to take advantage of these reduced disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

Corporate Information

We were initially incorporated under the laws of the State of California in December 1995 under the name Pulmonx. We reincorporated under the laws of the State of Delaware in December 2013 under the name Pulmonx Corporation.

Our principal executive offices are located at 700 Chesapeake Drive, Redwood City, California 94063. Our telephone number is 1-650-364-0400. Our website address is *www.pulmonx.com*. The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not

consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

“Pulmonx,” the Pulmonx logo, and other trademarks or service marks of Pulmonx Corporation appearing in this prospectus are the property of Pulmonx Corporation. This prospectus contains additional trade names, trademarks, and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or TM symbols.

The Offering

Common stock offered by us	shares.
Common stock to be outstanding after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to additional shares of our common stock at the public offering price less estimated underwriting discounts and commissions.
Use of proceeds	We estimate the net proceeds to us from issuance and sale of shares of our common stock in this offering will be approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional shares in full, based upon an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The principal purposes of this offering are to increase our financial flexibility, create a public market for our common stock and facilitate our future access to the capital markets. We currently intend to use the net proceeds from this offering to hire additional sales and marketing personnel and expand marketing programs in the United States, Europe and Asia Pacific to promote the sales of Zephyr Valves, to fund product development and research and development activities, in accordance with the terms of the Loan and Security Agreement (Oxford Agreement) with Oxford Finance LLC (Oxford) and based on the amount drawn thereunder, to pay a success fee of $1.9 million to Oxford on the closing of this offering and the remaining proceeds for working capital and general corporate purposes, including acquisitions or strategic investments in complementary businesses or technologies, although we do not currently have any plans for any such acquisitions or investments. These expectations are subject to change. See “Use of Proceeds” for additional information.
Risk factors	Investing in our common stock involves a high degree of risk. See “Risk Factors” beginning on page 12 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock.
Proposed Nasdaq Global Market symbol	“LUNG”

The number of shares of our common stock that will be outstanding after this offering is based on 198,974,494 shares of common stock outstanding as of December 31, 2019, which includes (i) 175,832,872 shares of common stock issuable upon the conversion of all of our outstanding shares of convertible preferred stock outstanding as of December 31, 2019, and (ii) 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019, and excludes:

- 32,793,421 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2019, at a weighted-average exercise price of $0.17 per share;
- 776,032 shares of our common stock reserved for issuance under our 2010 Stock Plan, which shares will cease to be available for issuance at the time our 2020 Equity Incentive Plan becomes effective;
- shares of our common stock reserved for future issuance pursuant to our 2020 Equity Incentive Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year;

- shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year; and

- 4,155 shares of our common stock held as treasury stock.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- a -for- reverse stock split of our common stock to be effected on , 2020;

- the automatic conversion of all outstanding shares of our preferred stock outstanding as of December 31, 2019, including 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019, into an aggregate of 177,971,620 shares of our common stock immediately upon the closing of this offering;

- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the adoption of our amended and restated bylaws, each of which will occur in connection with the closing of this offering;

- the expiration of warrants to purchase 14,191 shares of our Series C-1 convertible preferred stock that were outstanding as of December 31, 2019 and expired on February 9, 2020;

- no exercise of outstanding options after December 31, 2019; and

- no exercise by the underwriters of their option to purchase additional shares of our common stock.

Summary Consolidated Financial Data

The following tables summarize, for the periods and as of the dates indicated, our consolidated financial data. We have derived the consolidated statements of operations data for the years ended December 31, 2018 and 2019 and the consolidated balance sheet data as of December 31, 2019 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future.

When you read this summary consolidated financial data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as "Selected Consolidated Financial and Other Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this prospectus.

	Years Ended December 31,	
	2018	2019
	(in thousands, except share and per share amounts)	
Consolidated Statements of Operations Data:		
Revenue	$ 20,004	$ 32,595
Cost of goods sold	7,718	10,181
Gross profit	12,286	22,414
Operating expenses:		
Research and development	6,991	6,049
Selling, general and administrative	20,347	34,203
Total operating expenses	27,338	40,252
Loss from operations	(15,052)	(17,838)
Interest income	21	432
Interest expense	(2,520)	(2,317)
Other income (expense), net	(916)	(617)
Net loss before tax	(18,467)	(20,340)
Income tax expense	12	363
Net loss	$ (18,479)	$ (20,703)
Net loss per share attributable to common stockholders, basic and diluted[(1)]	$ (1.10)	$ (1.17)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted[(1)]	16,748,545	17,761,858
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[(1)]		$ (0.11)
Weighted-average shares used in computing pro forma net loss per share, basic and diluted (unaudited)[(1)]		180,925,287

(1) For an explanation of the method used to calculate our historical and pro forma basic and diluted net loss per share and weighted average number of shares used in the computation of per share amounts, see Note 12 to our consolidated financial statements included elsewhere in the prospectus.

	As of December 31, 2019		
	Actual	Pro forma[1]	Pro forma as Adjusted[2][3]
		(unaudited)	
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash, cash equivalents and short-term marketable securities	$ 28,347	$ 30,608	
Working capital[4]	26,910	29,171	
Total assets	53,533	55,794	
Derivative Liability	1,165	1,165	
Convertible preferred stock warrant liability	—	—	
Term loan	14,965	14,965	
Total liabilities	35,572	35,572	
Convertible preferred stock	205,339	—	
Accumulated deficit	(210,503)	(210,503)	
Total stockholders' (deficit) equity	(187,378)	20,222	

(1) The pro forma consolidated balance sheet data gives effect to (i) the exercise of our convertible preferred stock warrants into 2,138,748 shares of our Series C-1 convertible preferred stock for $2.3 million in January and February 2020; (ii) the automatic conversion of all (a) shares of our convertible preferred stock outstanding as of December 31, 2019 and (b) shares of our convertible preferred stock issued as a result of the exercise of our convertible preferred stock warrants discussed in (i) above into an aggregate of 177,971,620 shares of our common stock which resulted in the reclassification of (A) the carrying value of our convertible preferred stock to common stock and additional paid-in capital and (B) our convertible preferred stock warrant liabilities to common stock and additional paid-in capital, in connection with such conversion, all of which will occur in connection with the closing of this offering; and (iii) the filing of our amended and restated certificate of incorporation in connection with the closing of this offering.

(2) Reflects (i) the pro forma adjustments described in footnote (1); (ii) the issuance and sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us; and (iii) the payment of a $1.9 million success fee to Oxford in accordance with the terms of the Oxford Agreement, reflected as a derivative liability (see Note 4 to our consolidated financial statements).

(3) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover of this prospectus), would increase (decrease) the amount of each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase (decrease) the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming the assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover of this prospectus), remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

(4) We define working capital as current assets less current liabilities. See our audited consolidated financial statements and the related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities as of December 31, 2019.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this prospectus, including our consolidated financial statements and the related notes appearing at the end of this prospectus and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding to invest in our common stock. Any of these events could cause the trading price of our common stock to decline, which would cause you to lose all or part of your investment. Our business, results of operations, financial condition, ability to accomplish our strategic objectives or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material.

Risks Related to Our Business and Strategy

We have a history of significant net losses, which we expect to continue, and we may not be able to achieve or sustain profitability in the future.

We have incurred net losses since our inception. For the year ended December 31, 2019, we had net losses of $20.7 million and we expect to continue to incur additional losses. As of December 31, 2019, we had an accumulated deficit of $210.5 million. We expect to continue to incur significant sales and marketing, research and development, regulatory and other expenses as we grow our sales force and expand our marketing efforts to increase adoption of our products, expand existing relationships with our customers, obtain regulatory clearances or approvals for our planned or future products, conduct clinical trials on our existing and planned or future products and develop new products or add new features to our existing products. In addition, we expect our general and administrative expenses to increase following this offering due to the additional costs associated with being a public company. The net losses that we incur may fluctuate significantly from period to period. We will need to generate significant additional revenue in order to achieve and sustain profitability. Even if we achieve profitability, we cannot be sure that we will remain profitable for any substantial period of time.

We have limited experience marketing and selling our solution.

We began commercializing our solution and the Zephyr Valve in the United States in 2018 and, through our predecessors, in Europe in 2003. Our limited commercialization experience and limited number of approved or cleared products make it difficult to evaluate our current business and predict our future prospects. These factors also make it difficult for us to forecast our future financial performance and growth, and such forecasts are subject to a number of uncertainties, including our ability to successfully complete clinical trials and obtain pre-market approval or 510(k) clearance by the FDA for future planned products in the United States or in key international markets. Our commercialization efforts will depend on the efforts of our management and sales team, our third-party suppliers, physicians and hospitals, and general economic conditions, among other factors, including the following:

- the effectiveness of our marketing and sales efforts in the United States and internationally;
- our success in educating physicians and patients about the benefits, administration and use of the Zephyr Valves;
- the acceptance by physicians, patients and payors of the safety and effectiveness of the Zephyr Valves, including the long-term data;
- our third-party suppliers' ability to supply the components of the Zephyr Valves in a timely manner, in accordance with our specifications and in compliance with applicable regulatory requirements, and to remain in good standing with regulatory agencies;
- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing therapies;

- our ability to obtain, maintain and enforce our intellectual property rights in and to the Zephyr Valves;
- the emergence of competing technologies and other adverse market developments, and our need to enhance the Zephyr Valves or develop new products to maintain market share in response to such competing technologies or market developments;
- our ability to raise additional capital on acceptable terms, or at all, if needed to support the commercialization of the Zephyr Valves; and
- our ability to achieve and maintain compliance with all regulatory requirements applicable to the Zephyr Valves.

If our assumptions regarding the risks and uncertainties we face, which we use to plan our business, are incorrect or change due to circumstances in our business or our markets, or if we do not address these risks successfully, it will negatively affect our business, financial condition and results of operations.

We currently rely on a single product, the Zephyr Valve, which can only be marketed for limited indications, and if we are not successful in commercializing the Zephyr Valve, our business, financial condition and results of operations will be negatively affected.

Our business currently depends entirely on our ability to successfully commercialize the Zephyr Valve, as well as our overall solution, in a timely manner. We have no other therapeutic products currently approved for sale in the United States and we may never be able to develop additional marketable products or enhancements to the Zephyr Valve solution. Currently, our solution is only available to treat patients with severe emphysema in the United States and additional limited indications internationally where we have obtained the necessary regulatory approvals or clearances. Therefore, we are dependent on widespread market adoption of our solution for this limited use-case and we will continue to be dependent on this use-case for the foreseeable future. There can be no assurance that our solution will gain a substantial degree of market acceptance among specialty physicians, patients or healthcare providers. Our failure to successfully increase sales of our solution or develop solutions that address forms of COPD beyond severe emphysema and obtain any necessary regulatory approvals or clearances in connection therewith could negatively affect our business, financial condition and results of operations.

Our success depends in large part on the success of the Zephyr Valve. If we are unable to successfully market and sell the Zephyr Valves, as well as our overall solution, to patients with severe emphysema, it will negatively affect our business, financial condition and results of operations.

Our success will depend on our ability to bring awareness to our solution, and the Zephyr Valve in particular, and educate hospitals and physicians regarding the benefits of our solution over existing products and services and to encourage those parties to recommend our solution to their patients. Sales of Zephyr Valves and delivery catheters accounted for most of our revenue for the year ended December 31, 2019 and we expect that sales of Zephyr Valves and delivery catheters will continue to account for most of our revenue going forward. We do not know if our solution will be successful over the long term. Moreover, market acceptance may be hindered if physicians are not presented with compelling data demonstrating the efficacy of our solution compared to alternative procedures and technologies. Any studies we, or third parties which we sponsor, may conduct comparing our solution with alternative treatments for severe emphysema will be expensive, time consuming and may not yield positive results. Additionally, adoption will be directly influenced by a number of financial factors, including the ability of providers to obtain sufficient reimbursement from payors for deploying our solution. The safety, efficacy, performance and cost-effectiveness of our solution, on a stand-alone basis and relative to competing treatments and services, will determine the willingness of payors to cover the procedure. While we have established positive coverage policies with major national private payors, such as Aetna and Humana, other commercial payors, such as the Blue Cross Blue Shield family of plans, do not currently consider our solution medically necessary. No matter the level of coverage by the commercial payor, each patient is generally considered on a case-by-case basis. In addition, Medicare, currently without a public coverage policy, covers our solution for patients when medically necessary on a case-by-case basis. Physicians may be reluctant to recommend our solution to patients covered by such plans with

no specific policies because of the uncertainty surrounding reimbursement, rates and the administrative burden of interfacing with patients to answer their questions and support their efforts to obtain adequate reimbursement for our solution. If physicians do not adopt and recommend our solution, it will negatively affect our business, financial condition and results of operations.

Our business is dependent on hospital, physician and patient adoption of our solution as a treatment for severe emphysema. If hospitals, physicians or patients are unwilling to change current practices to adopt our solution, it will negatively affect our business, financial condition and results of operations.

Our primary strategy to grow our revenue is to take a stepwise approach to market development across key stakeholders in severe emphysema treatment, such as hospitals, physicians and patients. To succeed, our sales force must build deep relationships with pulmonary physicians to encourage them and their hospitals to develop emphysema centers of excellence, where physicians are instructed in the workup of advanced COPD and performance of bronchoscopic lung volume reduction using our solution, that offer our solution as a treatment for severe emphysema. In addition, we utilize direct-to-patient marketing initiatives to drive demand through patient empowerment. While the number of hospitals incorporating our solution has increased in recent years, there is a significant group of hospitals and physicians who have not yet adopted our solution, and additional hospitals and physicians may choose not to adopt our solution for a number of reasons, including:

- inadequate recruiting or training of talented sales force in existing and new markets to facilitate outreach and further adoption and awareness of Zephyr Valve;
- lack of experience with our solution and the Zephyr Valve as a treatment alternative;
- the failure of key opinion leaders to continue to provide recommendations regarding the Zephyr Valve, or to assure physicians, patients and healthcare payors of the benefits of the Zephyr Valve as an attractive alternative to other treatment options;
- perceived inadequacy of evidence supporting clinical benefits or cost-effectiveness of our solution over existing alternatives;
- a perception among some physicians of patients' inability to tolerate the procedure required to implant our solution;
- liability risks generally associated with the use of new products and procedures;
- the training required to use new products;
- lack of availability of adequate third-party payor coverage or reimbursement;
- access to hospital bidding processes;
- competing products and alternatives; and
- introduction of other novel alternative therapies to treat severe emphysema.

We focus our sales, marketing and training efforts primarily on pulmonologists. However, physicians from other disciplines, including primary care physicians, as well as other medical professionals, such as nurse practitioners, respiratory technicians, radiologists and community physicians, are often the initial point of contact for patients with severe emphysema.

These physicians and other medical professionals commonly screen and treat patients with severe emphysema, and are likely to recommend medical management, inhaled medications, pulmonary rehabilitation and supplemental oxygen, or more invasive LVRS or lung transplantations. We believe that educating physicians in these disciplines

and other medical professionals about the clinical merits and patient benefits of our solution as a minimally invasive treatment for severe emphysema is a key element of increasing the adoption of our solution. If additional physicians or other medical professionals do not adopt, or existing physician customers cease referring patients to, our solution for any reason, including those listed above, our ability to execute our growth strategy will be impaired, and it will negatively affect our business, financial condition and results of operations.

In addition, patients will not qualify for our solution if, among other potential reasons, their lung anatomy has collateral ventilation that does not allow for effective treatment with the Zephyr Valve. Patients may not adopt our solution if they are reluctant to undergo a minimally invasive procedure, if they are worried about potential adverse effects of our solution, such as infection, discomfort or weakness, or if they are unable to obtain adequate third-party coverage or reimbursement.

If we fail to receive access to hospital facilities, our sales may decrease.

In the United States, in order for physicians to use the Zephyr Valve, we expect that the hospital facilities where these physicians treat patients will typically require us to enter into purchasing contracts setting forth the terms and conditions under which the hospital facilities will purchase Zephyr Valves. This process can be lengthy and time-consuming and require extensive negotiations and management time, and potentially result in delays and increases to the sales cycle before we can sell the Zephyr Valve to these hospitals. In the European Union, certain institutions may require us to engage in a contract bidding process in the event that such institutions are considering making purchase commitments that exceed specified cost thresholds, which vary by jurisdiction. These processes are only open at certain periods of time, and we may not be successful in the bidding process. If we do not receive access to hospital facilities via these contracting processes or otherwise, or if we are unable to secure contracts or tender successful bids, our sales may decrease, and our operating results may be harmed. Furthermore, we may expend significant effort in these time-consuming processes and still may not obtain a purchase contract from such hospitals.

Use of our solution requires appropriate physician training, and inadequate training may lead to negative patient outcomes and negatively affect our business, financial condition and results of operations.

The successful implantation of the Zephyr Valve depends in part on the training and skill of the physician performing the procedure and on adherence to appropriate patient selection and proper techniques provided in training sessions conducted by our training faculty. For example, we train physicians to ensure correct patient selection and treatment planning using the StratX Platform and Chartis System, and proper placement of the Zephyr Valve. Physicians could experience difficulty with the technique necessary to successfully implant the valve and may not achieve the technical competency necessary to complete the training program, or they could fail to properly learn how to interpret our StratX Platform or Chartis System. Moreover, physicians rely on their previous medical training and experience when using our solution, and we cannot guarantee that all such physicians will have the necessary skills to properly identify ideal candidates and to perform the procedure. We do not control which physicians use our solution or how much training they receive, and physicians who have not completed our training sessions may nonetheless attempt to use our solution. If physicians implant the Zephyr Valve incorrectly, or do so in a manner that is inconsistent with its labeled indications, with components that are not our products, in patients who are not good candidates, or without adhering to or completing our training sessions, their patient outcomes may not be consistent with the outcomes achieved in our clinical trials. This result may negatively impact the perception of patient benefit and safety, and limit adoption of our solution as a treatment for severe emphysema and our products that facilitate the procedure, which will negatively affect our business, financial condition and results of operations.

In addition, we may experience difficulty growing the number of physicians who complete our training program if patient demand is low, if the length of time necessary to train each physician is longer than expected, if the capacity of our commercial organization to train physicians is less than expected or if we are unable to sufficiently grow our sales force. All these events would lead to fewer trained physicians qualified to implant the Zephyr Valve, which could negatively affect our business, financial condition and results of operations.

Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations.

The most common serious complications relating to the use of the Zephyr Valve include pneumothoraces, worsening of COPD symptoms, hemoptysis, pneumonia, dyspnea, respiratory failure and, in rare cases, death. Pneumothoraces occur when a lung collapses due to an air leak inside the lung and may result from rapid shifts in air volume in the chest as the target lobe deflates and the neighboring lobe expands following the Zephyr Valve treatment. A pneumothorax typically requires placement of a chest tube to manage the air leak. While most pneumothoraces can be readily managed with standard medical care, in rare cases they can be life-threatening, particularly if left untreated. In the event the pneumothorax does not resolve with standard management, one or more valves can be removed to re-inflate the lung; these are typically replaced later when the pneumothorax has resolved.

In our clinical trials, pneumothoraces occurred in 18-34% of patients treated with the Zephyr Valve, and in the LIBERATE study, 17% of the pneumothorax events required no intervention and resolved on their own. Patients who have had their pneumothoraces successfully treated had comparable outcomes to those who did not experience a pneumothorax, other than that their hospital stays were extended by approximately a week compared to the three nights for patients without pneumothoraces.

In the LIBERATE study, the majority of pneumothoraces (76%) occurred within three days following a bronchoscopy procedure. During the Treatment Period (day of procedure to 45 days), there were a total of four deaths (3.1%) in the Zephyr Valve Group (which received Zephyr Valves plus medical management) and none in the Control Group (which received medical management alone). Three of the four deaths were deemed by the investigators to be definitely related to treatment with Zephyr Valves and the remaining one was deemed by the investigators to be probably related to treatment with Zephyr Valves. Each patient that died experienced pneumothorax, with three deaths directly attributed to the pneumothorax and the fourth death the result of respiratory failure, after the pneumothorax had resolved. Two of the pneumothorax-related deaths occurred early in the study when patients were being kept in the hospital for one night after the procedure. In order to more closely monitor patients, the study protocol was subsequently amended to keep patients in the hospital for five nights. Based on the full study data, current practice is to keep patients in the hospital for a minimum of three nights post-treatment. Post-hoc analysis has helped to identify risk factors for the group of patients at a higher risk of having a complex pneumothorax event (complex pneumothorax defined as requiring removal of all valves or resulting in death) should one occur. Such high-risk patients include those who are not treated in the most diseased lobe and have greater than 60% destruction of the untreated lung. All four patients who experienced a pneumothorax and died were within this high-risk group. This learning is incorporated in our physician training program for physicians to identify such high-risk patients and to consider alternative targets or other risk mitigation strategies. During the Longer-Term Period (46 days after procedure to 12 months), there was one death (0.8%) in the Zephyr Valve Group from a COPD exacerbation, deemed by the investigators not to be related to treatment with Zephyr Valves, and one cardiac arrhythmia related death in the Control Group (1.6%).

Outside of clinical trials, patients treated with the Zephyr Valve have also experienced serious complications, including pneumothoraces and death related to the Zephyr Valve.

Serious complications as a result of treatment with Zephyr Valves, and any increase in the rate of complications in or outside of clinical trials, could cause doctors, hospitals and patients to limit adoption of our solution and subject us to costly litigation, require us to pay substantial amounts of money to patients, delay, negatively impact or end our opportunity to receive or maintain regulatory approval to market our products, or require us to suspend or abandon our commercialization efforts, which may negatively impact adoption as well as our business, financial condition and results of operations. Even in a circumstance in which we do not believe that a complication is related to the Zephyr Valve or treatment with the Zephyr Valve, the investigation into the circumstance may be time-consuming or inconclusive and may interrupt our sales efforts or impact and limit the type of regulatory approvals the Zephyr Valve receives or maintains and any related claims may negatively impact adoption as well as our business, financial condition and results of operations. Moreover, perceptions regarding the safety of the Zephyr Valve could be affected even if such complications are unrelated to the Zephyr Valve or treatment with the Zephyr Valve.

Further, our current products are contraindicated, and therefore should not be used, in certain patients, including those for whom bronchoscopic procedures are contraindicated, with evidence of active pulmonary infection, with known allergies to Nitinol (nickel-titanium) or its constituent metals (nickel or titanium) or silicone, who have not quit smoking, or with large bullae encompassing greater than 30% of either lung, and such contraindication may limit adoption and, as a result, negatively impact our business, financial condition and results of operations.

If we are unable to achieve and maintain adequate levels of coverage or reimbursement for our solution, or any future products we may seek to commercialize, or if patients are left with significant out-of-pocket costs, our commercial success may be severely hindered.

We currently derive substantially all of our revenue from the sale of our products to hospitals and distributors and expect this to continue for the foreseeable future. We primarily sell Zephyr Valves through a direct sales force that primarily engages with pulmonologists in the United States, Europe and Asia Pacific. Hospitals typically bill various third-party payors to cover all or a portion of the costs and fees associated with the procedures in which our solution is used and bill patients for any deductibles or co-payments. As of December 31, 2019, commercial payors such as Aetna, Humana, Priority Health and Emblem Health have issued positive coverage policies for endobronchial valve procedures. United Healthcare removed the endobronchial valve codes from their non-covered list, and as such no longer considers the procedure unproven or experimental. Other commercial payors, such as many plans in the Blue Cross Blue Shield family of plans, do not yet consider our solution medically necessary. Medicare, currently without a public coverage policy, covers our solution for patients when medically necessary on a case-by-case basis, and other commercial insurers not described above are approving pre-authorization requests on a case-by-case basis.

The Centers for Medicare & Medicaid Services (CMS) have established guidelines for the coverage and reimbursement of certain products and procedures by Medicare. In general, in order to be reimbursed by Medicare, a healthcare procedure furnished to a Medicare beneficiary must be reasonable and necessary for the diagnosis or treatment of an illness or injury, or to improve the functioning of a malformed body part. The methodology for determining coverage status and the amount of Medicare reimbursement varies based upon, among other factors, the setting in which a Medicare beneficiary received healthcare products and services. Any changes in federal legislation, regulations and policy affecting CMS coverage and reimbursement relative to the procedure using our products could have a material effect on our performance. While no national coverage determination (NCD) or local coverage determination (LCD) exists for endobronchial valves currently, CMS could develop an NCD, or one or more Medicare contractors could develop an LCD that either restricts coverage or restricts the patient population deemed appropriate for the treatment.

Physicians that insert the Zephyr Valve, or the hospitals for which they work, may be subject to reimbursement claim denials upon submission of the claim. Physicians or hospitals may also be subject to recovery of overpayments if a payor makes payment for the claim and subsequently determines that the payor's coding, billing or coverage policies were not followed. Whenever possible, pre-authorization for coverage for the procedure is recommended before the procedure is performed. When pre-authorization is not obtained or not allowed, and the procedure is performed and not covered by third-party payors, physicians or hospitals typically directly bill patients enrolled with these third-party payors for the costs and fees associated with the procedures in which our products are used. Moreover, because there is often no separate reimbursement for supplies used in surgical procedures, the additional cost associated with the use of our solution can affect the profit margin of the hospital or surgery center where the procedure is performed. Some of our target physicians and hospitals may be unwilling to adopt our products in light of the additional associated cost. Further, any decline in the amount payors are willing to reimburse physicians and hospitals could make it difficult for existing physicians and hospitals to continue using or to adopt our solution and could create additional pricing pressure for us. If we are forced to lower the price we charge for our solution, our gross margins will decrease, which will negatively affect our business, financial condition and results of operations.

Outside of the United States, reimbursement levels vary significantly by country and by patient. Reimbursement is obtained from a variety of sources, including government sponsors, hospital budgets, or private health insurance plans, or combinations thereof. We have established reimbursement access in countries across Europe and Asia Pacific, including Australia, Germany, the Netherlands, South Korea, the United Kingdom and other countries. Even

if we succeed in bringing our products to market in additional foreign countries, uncertainties regarding future healthcare policy, legislation and regulation, as well as private market practices, could affect our ability to sell our products in commercially acceptable quantities at acceptable prices.

Third-party payors, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In addition, no uniform policy of coverage and reimbursement for procedures using our solution exists among third-party payors. Therefore, coverage and reimbursement for procedures using our products can differ significantly from payor to payor. Payors continually review new and existing technologies for possible coverage and can, without notice, deny or reverse coverage for new or existing products and procedures. There can be no assurance that third-party payor policies will provide coverage for procedures in which our products are used. If we are not successful in reversing existing non-coverage policies, if third-party payors that currently cover or reimburse our products and related procedures reverse or limit their coverage in the future or if other third-party payors issue similar policies, this will negatively affect our business, financial condition and results of operations.

Further, we believe that future coverage and reimbursement may be subject to increased restrictions, such as additional prior authorization requirements, both in the United States and in international markets. Third-party coverage and reimbursement for procedures using our solution or any of our products in development for which we may receive regulatory approval may not be available or adequate in either the United States or international markets, which will negatively affect our business, financial condition and results of operations.

Third-party payors and physicians who do not cover or use the Zephyr Valve may require additional clinical data prior to maintaining coverage of or adopting the Zephyr Valve.

Our success depends on physician and third-party payor acceptance of our solution as an effective treatment option for patients with severe emphysema. If physicians or payors do not find our body of published clinical evidence and data compelling or wish to wait for additional studies, they may choose not to use or provide coverage and reimbursement for our solution.

In addition, the long-term effects of use of the Zephyr Valve to treat severe emphysema are not yet known. Certain physicians, hospitals and payors may prefer to see longer-term safety and efficacy data published than we have produced. Further, we cannot provide assurance that any data that we or others may generate in the future will be consistent with that observed in our existing clinical studies.

If we fail to retain marketing and sales personnel and, as we grow, fail to increase our marketing and sales capabilities or develop broad awareness of our solution in a cost-effective manner, we may not be able to generate revenue growth.

We have limited experience marketing and selling our solution. We currently rely on our direct sales force to sell our solution in targeted geographic regions and distributors in certain regions outside the United States, and any failure to maintain and grow our direct sales force will negatively affect our business, financial condition and results of operations. The members of our direct sales force are highly trained and possess substantial technical expertise, which we believe is critical in increasing adoption of our solution. The members of our U.S. sales force are at-will employees. The loss of these personnel to competitors, or otherwise, will negatively affect our business, financial condition and results of operations. If we are unable to retain our direct sales force personnel or replace them with individuals of equivalent technical expertise and qualifications, or if we are unable to successfully instill such technical expertise in replacement personnel, it may negatively affect our business, financial condition and results of operations.

In order to generate future growth, we plan to continue to expand and leverage our sales and marketing infrastructure to increase the number of customers and emphysema centers of excellence. Identifying and recruiting qualified sales and marketing personnel and training them on our solution, on applicable federal and state laws and regulations and on our internal policies and procedures requires significant time, expense and attention. It often takes several months or more before a sales representative is fully trained and productive. Our sales force may

subject us to higher fixed costs than those of companies with competing techniques or products that utilize independent third parties, which could place us at a competitive disadvantage. It will negatively affect our business, financial condition and results of operations if our efforts to expand and train our sales force do not generate a corresponding increase in revenue, and our higher fixed costs may slow our ability to reduce costs in the face of a sudden decline in demand for our solution. Any failure to hire, develop and retain talented sales personnel, to achieve desired productivity levels in a reasonable period of time or timely reduce fixed costs, could negatively affect our business, financial condition and results of operations. Our ability to increase our customer base and achieve broader market acceptance of our solution will depend to a significant extent on our ability to expand our marketing efforts. We plan to dedicate significant resources to our marketing programs. It will negatively affect our business, financial condition and results of operations if our marketing efforts and expenditures do not generate a corresponding increase in revenue. In addition, we believe that developing and maintaining broad awareness of our solution in a cost-effective manner is critical to achieving broad acceptance of our solution and expanding domestically and internationally. Promotion activities may not generate patient or physician awareness or increase revenue, and even if they do, any increase in revenue may not offset the costs and expenses we incur in building our brand. If we fail to successfully promote, maintain and protect our brand, we may fail to attract or retain the physician acceptance necessary to realize a sufficient return on our brand building efforts, or to achieve the level of brand awareness that is critical for broad adoption of our solution.

We have limited long-term data regarding the safety and effectiveness of our solution, including the Zephyr Valve. The only safety and effectiveness data of our solution, including the Zephry Valve, is limited to one year following placement and we are required to conduct extension studies to follow up on safety and effectiveness out to five years.

Although we have demonstrated the safety, effectiveness and clinical advantages of our solution in multiple clinical trials in approximately 450 patients selected using the Chartis System, the Zephyr Valve is still a relatively new treatment for severe emphysema. The long-term effects of using our solution in a large number of patients have not been studied and the results of short-term clinical use of such products do not necessarily predict long-term clinical benefits or reveal long-term adverse effects. We are required to conduct the LIBERATE extension study to follow up on safety and effectiveness out to five years. After the completion of the one-year follow up, 115 Zephyr Valve patients and 47 crossover patients (162 total patients) entered the LIBERATE extension study. The results of this extension study will not be available until February 2023. Our ability to interpret the data from this long-term follow-up of patients with this progressive disease may be limited by the fact that the matched control group exited the study after one year. The results of clinical trials of our solution conducted to date and ongoing or future studies and trials of our current, planned or future products may not be predictive of the results of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Our interpretation of data and results from our clinical trials do not ensure that we will achieve similar results in future clinical trials in other patient populations. In addition, pre-clinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their products performed satisfactorily in pre-clinical studies and earlier clinical trials have nonetheless failed to replicate results in later clinical trials and subsequently failed to obtain marketing approval. Products in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through nonclinical studies and earlier clinical trials.

The continuing development of our products depends upon our maintaining strong working relationships with physicians.

The research, development, marketing and sale of our current products and potential new and improved products or future product indications for which we receive regulatory clearance or approval depend upon our maintaining working relationships with physicians. We rely on these professionals to provide us with considerable knowledge and experience regarding the development, marketing and sale of our products. Physicians assist us in clinical trials and in marketing, and as researchers, product consultants and public speakers. If we cannot maintain our strong working relationships with these professionals and continue to receive their advice and input, the development and marketing of our products could suffer, which could negatively affect our business, financial condition and results of operations. At the same time, the medical device industry’s relationship with physicians is under increasing scrutiny by the U.S. Department of Health and Human Services Office of Inspector General (OIG), the U.S. Department of

Justice (DOJ), the state attorneys general and other foreign and domestic government agencies. Our failure to comply with requirements governing the industry's relationships with physicians or an investigation into our compliance by the OIG, the DOJ, state attorneys general and other government agencies, could negatively affect our business, financial condition and results of operations. Additional information regarding the laws impacting our relationships with physicians and other healthcare professionals can be found below under "Risks Related to Government Regulation and Our Industry."

We rely on third parties to perform certain aspects of the CT scan analysis within the StratX Platform.

We rely on third-party service providers to upload and analyze CT scan data on the StratX Platform. In order to make the StratX Platform available to physicians, we contract with a third-party cloud service. This third-party cloud service enables physicians to upload CT scan data while removing protected health information (PHI) of patients from that data, in case the physicians have, inadvertently, not removed the PHI themselves. We also contract with additional third-party service providers to analyze the CT scan data using their proprietary software, and provide quantitative results via an easy-to-read report that we designed for our solution (StratX Lung Report). The StratX Lung Report is then made available to physicians in the third-party cloud service.

This service is critical and there are relatively few alternatives. These third-party service providers may be unwilling or unable to provide the necessary services reliably and at the levels we anticipate or that are required by the market. While these third-party service providers have generally met our demand for their services on a timely basis in the past, we cannot guarantee that they will in the future be able to meet our demand for their services, either because of acts of nature, the nature of our agreements or potential disputes with those service providers or our relative importance to them as a customer, and our service providers may decide in the future to discontinue or reduce the level of business they conduct with us. If we are required to change service providers for any reason, including due to any change in or termination of our relationships with these third parties, we may lose sales, experience delays, incur increased costs or otherwise experience impairment to our customer relationships. We cannot guarantee that we will be able to establish alternative relationships on similar terms, without delay or at all.

We depend on a limited number of single-source suppliers to manufacture our products, which makes us vulnerable to supply shortages and price fluctuations that could negatively affect our business, financial condition and results of operations.

We rely on single-source suppliers for the components, sub-assemblies and materials for our products. These components, sub-assemblies and materials are critical and there are no or relatively few alternative sources of supply. These single-source suppliers may be unwilling or unable to supply the necessary materials and components or manufacture and assemble our products reliably and at the levels we anticipate or that are required by the market. While our suppliers have generally met our demand for their products and services on a timely basis in the past, we cannot guarantee that they will in the future be able to meet our demand for their products, either because of acts of nature, the nature of our agreements with those manufacturers or our relative importance to them as a customer, and our suppliers may decide in the future to discontinue or reduce the level of business they conduct with us. If we are required to change suppliers due to any change in or termination of our relationships with these third parties, or if our suppliers are unable to obtain the materials they need to produce our products at consistent prices or at all, we may lose sales, experience manufacturing or other delays, incur increased costs or otherwise experience impairment to our customer relationships. We cannot guarantee that we will be able to establish alternative relationships on similar terms, without delay or at all.

We have not qualified or obtained necessary regulatory approvals for additional suppliers for most of these components, sub-assemblies and materials, and we do not carry a significant inventory of these items. While we believe that alternative sources of supply may be available, we cannot be certain whether they will be available if and when we need them, or that any alternative suppliers would be able to provide the quantity and quality of components and materials that we would need to manufacture our products if our existing suppliers were unable to satisfy our supply requirements. To utilize other supply sources, we would need to identify and qualify new suppliers to our quality standards and obtain any additional regulatory approvals required to change suppliers, which could result in manufacturing delays and increase our expenses.

Although we require our third-party suppliers to supply us with components that meet our specifications and comply with applicable provisions of the FDA's Quality System Regulation (QSR) and other applicable legal and regulatory requirements in our agreements and contracts, and we perform incoming inspection, testing or other acceptance activities to ensure the components meet our requirements, there is a risk that our suppliers will not always act consistent with our best interests, and may not always supply components that meet our requirements or supply components in a timely manner.

We have limited experience manufacturing our products in significant commercial quantities and we face manufacturing risks that may adversely affect our ability to manufacture our products, reduce our gross margins and negatively affect our business, financial condition and results of operations.

Our business strategy depends on our ability to manufacture our current and future products in sufficient quantities and on a timely basis to meet customer demand, while adhering to product quality standards, complying with regulatory quality system requirements and managing manufacturing costs. We have a facility located in Redwood City, California, where we assemble, inspect, package, release and ship our products. We currently produce the Zephyr Valve and Chartis System at this facility, and we do not have redundant facilities. If this facility suffers damage, or a force majeure event, this could materially impact our ability to operate.

We are also subject to numerous other risks relating to our manufacturing capabilities, including:

- quality and reliability of components, sub-assemblies and materials that we source from third-party suppliers, that are required to meet our quality specifications, many of whom are our single source suppliers for the products they supply;
- our inability to secure components, sub-assemblies and materials in a timely manner, in sufficient quantities or on commercially reasonable terms;
- our inability to maintain compliance with quality system requirements or pass regulatory quality inspections;
- our failure to increase production capacity or volumes to meet demand;
- our inability to design or modify production processes to enable us to produce future products efficiently or implement changes in current products in response to design or regulatory requirements; and
- difficulty identifying and qualifying, and obtaining new regulatory approvals, for alternative suppliers for components in a timely manner.

These risks are likely to be exacerbated by our limited experience with our current products and manufacturing processes. As demand for our solution increases, we will have to invest additional resources to purchase components, sub-assemblies and materials, hire and train employees and enhance our manufacturing processes. If we fail to increase our production capacity efficiently, we may not be able to fill customer orders on a timely basis, our sales may not increase in line with our expectations and our operating margins could fluctuate or decline. In addition, even if future products in development share product features, components, sub-assemblies and materials with our existing products, the manufacture of these products may require modification of our current production processes or unique production processes, the hiring of specialized employees, the identification of new suppliers for specific components, sub-assemblies and materials or the development of new manufacturing technologies. It may not be possible for us to manufacture these products at a cost or in quantities sufficient to make these products commercially viable or to maintain current operating margins, all of which will negatively affect our business, financial condition and results of operations.

Our results of operations will be materially harmed if we are unable to accurately forecast customer demand for our solution and manage our inventory.

To ensure adequate inventory supply, we must forecast inventory needs and manufacture the Zephyr Valve and Chartis System based on our estimates of future demand for our solution. Our ability to accurately forecast demand for our solution could be negatively affected by many factors, including our failure to accurately manage our expansion strategy, product introductions by competitors, an increase or decrease in customer demand for our solution or for products of our competitors, our failure to accurately forecast customer acceptance of new products, unanticipated changes in general market conditions or regulatory matters and weakening of economic conditions or consumer confidence in future economic conditions. Inventory levels in excess of customer demand may result in inventory write-downs or write-offs, which would cause our gross margin to be adversely affected and could impair the strength of our brand. Conversely, if we underestimate customer demand for our solution, our internal manufacturing team may not be able to deliver products to meet our requirements, and this could result in damage to our reputation and customer relationships. In addition, if we experience a significant increase in demand, additional supplies of raw materials or additional manufacturing capacity may not be available when required on terms that are acceptable to us, or at all, or suppliers or may not be able to allocate sufficient capacity in order to meet our increased requirements, which will negatively affect our business, financial condition and results of operations.

We seek to maintain sufficient levels of inventory in order to protect ourselves from supply interruptions. As a result, we are subject to the risk that a portion of our inventory will become obsolete or expire, which could have a material adverse effect on our earnings and cash flows due to the resulting costs associated with the inventory impairment charges and costs required to replace such inventory.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. Accordingly, the results of any one quarter or period should not be relied upon as an indication of future performance. Our quarterly and annual operating results may fluctuate as a result of a variety of factors, many of which are outside our control and, as a result, may not fully reflect the underlying performance of our business. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the level of demand for our products and any future products, which may vary significantly;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;
- the timing and cost of obtaining regulatory approvals or clearances for planned or future products or indications;
- unanticipated pricing pressures;
- the rate at which we grow our sales force and the speed at which newly hired salespeople become effective, and the cost and level of investment therein;
- our ability to expand the geographic reach of our sales force;
- the degree of competition in our industry and any change in the competitive landscape of our industry, including consolidation among our competitors or future partners;
- coverage and reimbursement policies with respect to our products, and potential future products that compete with our products;

- the timing and success or failure of pre-clinical studies or clinical trials for our products or any future products we develop or competing products;
- positive or negative coverage in the media or clinical publications of our products or products of our competitors or our industry;
- the timing of customer orders or medical procedures using our products and the number of available selling days in any quarterly period, which can be impacted by holidays, the mix of products sold and the geographic mix of where products are sold, including any related foreign currency impact;
- seasonality, including possible seasonal slowing of demand for our products in the beginning and end of the year and summer months based on the elective nature of procedures performed using our products, and which may become more pronounced in the future as our business grows;
- the impact, if any, that the strain of coronavirus (COVID-19) that surfaced in Wuhan, China in December 2019 may have on the number of patients treated with Zephyr Valves;
- the timing and cost of, and level of investment in, research, development, licenses, regulatory approval, commercialization activities, acquisitions and other strategic transactions, or other significant events relating to our products, which may change from time to time;
- the cost of manufacturing our products, which may vary depending on the quantity of production and the terms of our agreements with third-party suppliers and manufacturers;
- the average number of Zephyr Valves used for a patient, pricing, discounts and incentives; and
- future accounting pronouncements or changes in our accounting policies.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Further, our historical results are not necessarily indicative of results expected for any future period, and quarterly results are not necessarily indicative of the results to be expected for the full year or any other period, and accordingly should not be relied upon as indicative of future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, it will negatively affect our business, financial condition and results of operations.

The sizes of the markets for our current and future products have not been established with precision and may be smaller than we estimate and may decline. Certain patients may not have regions of the lung with little to no collateral ventilation, making them poor candidates for the Zephyr Valve. In addition, if the overall rate of smokers continues to decline, this may eventually decrease the number of patients suffering from COPD and emphysema and, accordingly, who would benefit from our solution.

Our estimates of the annual total addressable markets for our current solution and products under development are based on a number of internal and third-party estimates, including, without limitation, the number of patients with severe emphysema treatable by our solution and the assumed prices at which we can sell our solution in markets that have not yet been established. While we believe our assumptions and the data underlying our estimates are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors.

For example, certain of these patients may not have regions of the lung with little to no collateral ventilation, making them poor candidates for the Zephyr Valve. As a result, our estimates of the annual total addressable market for our current or future products may prove to be incorrect.

Further, cigarette smoking is one of the leading causes of COPD and emphysema. It is estimated that smoking accounts for as many as 80% of COPD-related deaths and 38% of the nearly 16 million adults in the United States diagnosed with COPD report being current smokers. The overall rate of smoking among the U.S. adult population has been steadily declining from 42.4% in 1965 to a record low of 13.7% in 2018 and there are increased efforts to decrease the rate of smoking globally. If the overall rate of smokers continues to decline, this may eventually decrease the number of patients suffering from COPD and emphysema and, accordingly, who would benefit from our solution.

If the actual number of patients who would benefit from our solution, the price at which we can sell future products, or the annual total addressable market for our solution is smaller than we have estimated, it may impair our sales growth and negatively affect our business, financial condition and results of operations.

Failure of a key information technology system, process, or site could negatively affect our business, financial condition and results of operations.

We depend on our information technology systems for the efficient functioning of our business, including the manufacture, distribution and maintenance of our products, as well as for accounting, data storage, compliance, purchasing and inventory management. We also depend on the information technology systems of third parties for the analysis, data storage and communication associated with the StratX Platform. We currently do not have redundant information technology systems. Our information technology systems, and those of third parties, may be subject to computer viruses, ransomware or other malware, attacks by computer hackers, failures during the process of upgrading or replacing software, databases or components thereof, power outages, damage or interruption from fires or other natural disasters, hardware failures, telecommunication failures and user errors, among other malfunctions. We, or the third parties we rely upon, could be subject to an unintentional event that involves a third party gaining unauthorized access to our or its systems, which could disrupt our operations, corrupt our data or result in release of our confidential information. Technological interruptions would disrupt our operations, including our ability to timely ship and track product orders, project inventory requirements, manage our supply chain and otherwise adequately service our customers or disrupt our customers' ability use our products for treatments. Moreover, a disruption in access to the system that controls the StratX Platform would prevent physicians using our solution from receiving the StratX Lung Report indicating whether their patients are good candidates for the Zephyr Valve. In the event we experience significant disruptions, we may be unable to repair our systems in an efficient and timely manner. Accordingly, such events may disrupt or reduce the efficiency of our entire operation and negatively affect our business, financial condition and results of operations. Currently, we carry business interruption coverage to mitigate certain potential losses but this insurance is limited in amount, and we cannot be certain that such potential losses will not exceed our policy limits. Further, we do not carry any cyber insurance, which may expose us to certain potential losses for damages or result in penalization with fines in an amount exceeding our resources. We are increasingly dependent on complex information technology to manage our infrastructure. Our information systems require an ongoing commitment of significant resources to maintain, protect and enhance our existing systems. Failure to maintain or protect our information systems and data integrity effectively could negatively affect our business, financial condition and results of operations.

Litigation against us could be costly and time-consuming to defend and could result in additional liabilities.

We may from time to time be subject to legal proceedings and claims that arise in the ordinary course of business or otherwise, such as claims brought by our customers in connection with commercial disputes and employment claims made by our current or former employees. Claims may also be asserted by or on behalf of a variety of other parties, including government agencies, patients or vendors of our customers, or stockholders. For example, our Swiss subsidiary is currently party to a lawsuit with a former distributor outside the United States alleging that our Swiss subsidiary conducted unfair competitive practices and violated the exclusive distribution rights as a result of its termination of its distribution agreement. While we believe the claims are meritless and do not believe the impact of

such claims will be material to the Company's results of operations or financial position, an unfavorable outcome in this litigation could harm our business. Further, in the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities, and this risk is especially relevant to industries that experience significant stock price volatility. Any litigation involving us may result in substantial costs, operationally restrict our business, and may divert management's attention and resources, which may negatively affect our business, financial condition and results of operations.

We face the risk of product liability claims that would be expensive, divert management's attention and harm our reputation and business. We may not be able to maintain adequate product liability insurance.

Our business exposes us to the risk of product liability claims that are inherent in the testing, manufacturing and marketing of medical devices. This risk exists even if a device is cleared or approved for commercial sale by the FDA and manufactured in facilities licensed and regulated by the FDA or an applicable foreign regulatory authority. The Zephyr Valve is designed to affect, and any future products will be designed to affect, important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with the Zephyr Valve could result in patient injury or death. The medical device industry has historically been subject to extensive litigation over product liability claims, and we cannot offer any assurance that we will not face product liability suits. As discussed under "Business—Clinical Trials and Results," there were procedure-related deaths in our LIBERATE Study and we may be subject to product liability claims if the Zephyr Valve causes, or merely appears to have caused, patient injury or death. In addition, an injury that is caused by the activities of our suppliers, such as those who provide us with components and raw materials, may be the basis for a claim against us. Product liability claims may be brought against us by patients, physicians, or others selling or otherwise coming into contact with the Zephyr Valve, among others. If we cannot successfully defend ourselves against product liability claims, we will incur substantial liabilities and reputational harm. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- costs of litigation;
- distraction of management's attention from our primary business;
- the inability to commercialize our solution or new products;
- decreased demand for our products;
- damage to our business reputation;
- product recalls or withdrawals from the market;
- withdrawal of clinical trial participants;
- substantial monetary awards to patients or other claimants; or
- loss of sales.

While we may attempt to manage our product liability exposure by proactively recalling or withdrawing from the market any defective products, any recall or market withdrawal of our products may delay the supply of those products to our customers and may impact our reputation. We can provide no assurance that we will be successful in initiating appropriate market recall or market withdrawal efforts that may be required in the future or that these efforts will have the intended effect of preventing product malfunctions and the accompanying product liability that may result. Such recalls and withdrawals may also be used by our competitors to harm our reputation for safety or be perceived by patients as a safety risk when considering the use of our solution, either of which could negatively affect our business, financial condition and results of operations.

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter. Although we have product liability and clinical study liability insurance that we believe is appropriate, this insurance is subject to deductibles and coverage limitations. Our current product liability insurance may not continue to be available to us on acceptable terms, if at all, and, if available, coverage may not be adequate to protect us against any future product liability claims. If we are unable to obtain insurance at an acceptable cost or on acceptable terms or otherwise protect against potential product liability claims, we could be exposed to significant liabilities. A product liability claim, recall or other claim with respect to uninsured liabilities or for amounts in excess of insured liabilities could negatively affect our business, financial condition and results of operations. We do not carry specific hazardous waste insurance coverage, and our property, casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended. Additionally, we do not carry cyber insurance, which may expose us to certain potential losses for damages or result in penalization with fines in an amount exceeding our resources.

We also expect that operating as a public company will make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, on our board committees or as executive officers. We do not know, however, if we will be able to maintain existing insurance with adequate levels of coverage. Any significant uninsured liability may require us to pay substantial amounts, which would negatively affect our business, financial condition and results of operations.

Our indebtedness may limit our flexibility in operating our business and negatively affect our business, financial condition, results of operations and competitive position.

As of December 31, 2019, we had $15.0 million of principal balance outstanding under the Oxford Agreement. In February 2020, we terminated and paid off in full all amounts outstanding under the Oxford Agreement. In February 2020, we executed a Loan and Security Agreement (the CIBC Agreement) with Canadian Imperial Bank of Commerce (CIBC), which provided us with the ability to borrow up to $32 million in debt financing.

In order to service this indebtedness and any additional indebtedness we may incur in the future, we need to generate cash from our operating activities. Our ability to generate cash is subject, in part, to our ability to successfully execute our business strategy, as well as general economic, financial, competitive, regulatory and other factors beyond our control. We cannot assure you that our business will be able to generate sufficient cash flow from operations or that future borrowings or other financings will be available to us in an amount sufficient to enable us to service our indebtedness and fund our other liquidity needs. To the extent we are required to use cash from operations or the proceeds of any future financing to service our indebtedness instead of funding working capital, capital expenditures or other general corporate purposes, we will be less able to plan for, or react to, changes in our business, industry and in the economy generally. This will place us at a competitive disadvantage compared to our competitors that have less indebtedness.

In addition, the CIBC Agreement contains, and any agreements evidencing or governing other future indebtedness may contain, certain covenants that limit our ability to engage in certain transactions that may be in our long-term best interests. Subject to certain limited exceptions, these covenants limit our ability to, among other things:

- convey, sell, lease, transfer, assign, dispose of or otherwise make cash payments consisting of all or any part of our business or property;
- effect certain changes in our business, management, ownership or business locations;

- merge or consolidate with, or acquire all or substantially all of the capital stock or assets of, any other company;
- create, incur, assume or be liable for any additional indebtedness, or create, incur, allow or permit to exist any additional liens;
- pay cash dividends on, make any other distributions in respect of, or redeem, retire or repurchase, any shares of our capital stock;
- make certain investments;
- enter into transactions with our affiliates; and
- under certain circumstances, settle pending or threatened litigation for greater amounts than are disclosed to CIBC in writing from time to time.

While we have not previously breached and are not currently in breach of these or any of the other covenants contained in the CIBC Agreement, there can be no guarantee that we will not breach these covenants in the future. Our ability to comply with these covenants may be affected by events and factors beyond our control. In the event that we breach one or more covenants, our lender may choose to declare an event of default and require that we immediately repay all amounts outstanding, terminate any commitment to extend further credit and foreclose on the collateral granted to it to collateralize such indebtedness. The occurrence of any of these events could negatively affect our business, financial condition and results of operations.

Our industry is highly competitive, and we may not be able to compete successfully with larger companies, companies with longer operating histories or more established products, or companies with greater resources.

Our industry is subject to rapid change from the introduction of new products and technologies and other activities of industry participants. Our goal is to establish our solution as a standard of care for severe emphysema. Existing treatments include medical management, LVRS, lung transplantation as well as other minimally invasive treatments. The major competitive products include the Spiration Valve System (Olympus Corporation) and the InterVapor System (Broncus Medical, Inc.; not approved for use in the United States). The Spiration Valve System is an endobronchial technology designed to offer patients with severe emphysema a minimally invasive treatment option for lung volume reduction by redirecting air away from diseased areas of the lung to healthier tissue so that patients may breathe easier. Like Zephyr Valves, the Spiration Valve System is indicated to treat patients with heterogeneous emphysema; however, the Spiration Valve System is contraindicated for patients with homogeneous emphysema. The InterVapor System offers a non-surgical and non-implant therapy developed for lung disease including emphysema and lung cancer where vapor ablation is simply the application of heated pure water to tissue. These technologies, other products that are in current clinical trials, new drugs or additional indications for existing drugs could demonstrate better safety, effectiveness, clinical results, lower costs or greater physician and patient acceptance.

We compete, or may compete in the future, against other companies which have longer operating histories, more established products and greater resources, which may prevent us from achieving significant market penetration or improved operating results. These companies enjoy several competitive advantages, including established relationships with pulmonologists who commonly treat patients with emphysema, significantly greater name recognition and significantly greater sales and marketing resources.

In addition to existing competitors, other larger and more established companies may acquire or in-license competitive products and could directly compete with us. These competitors may also try to compete with us on price both directly, through rebates and promotional programs to high volume physicians and coupons to patients, and indirectly, through attractive product bundling with complementary products that offer convenience and an effectively lower price compared to the total price of purchasing each product separately. Larger competitors may also be able to offer greater customer loyalty benefits to encourage repeat use of their products and finance a

sustained global advertising campaign to compete with commercialization efforts of our products. Our competitors may seek to discredit our products by challenging our short operating history or relatively limited number of scientific studies and publications. Smaller companies could also launch new or enhanced products and services that we do not offer and that could gain market acceptance quickly. Additionally, certain of our competitors may challenge our intellectual property, may develop additional competing or superior technologies and processes and compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our market, there is the possibility of a competitor acquiring patents or other rights that may limit our ability to update our technologies and products which may impact demand for our products.

We have increased the size of our organization and expect to further increase it in the future. If we are unable to manage the anticipated growth, our business, financial condition and results of operations will be negatively affected.

Any growth that we experience in the future will require us to expand our sales personnel and manufacturing operations and general and administrative infrastructure. As a public company, we will need to support managerial, operational, financial and other resources. In addition to the need to scale our organization, future growth will impose significant added responsibilities on management, including the need to identify, recruit, train and integrate additional employees. Rapid expansion in personnel could mean that less experienced people manufacture, market and sell our solution, which could result in inefficiencies and unanticipated costs, reduced quality and disruptions to our operations. In addition, rapid and significant growth may strain our administrative and operational infrastructure. Our ability to manage our business and growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. If we are unable to manage our growth effectively, it may be difficult for us to execute our business strategy and negatively affect our business, financial condition and results of operations.

As demand for our solution or any of our future products increases, we will need to continue to scale our capacity, expand customer service, billing and systems processes and enhance our internal quality assurance program. We cannot assure you that any increases in scale, related improvements and quality assurance will be successfully implemented or that appropriate personnel will be available to facilitate the growth of our business. Failure to implement necessary procedures, transition to new processes or hire the necessary personnel could result in higher costs of processing data or inability to meet increased demand. If we encounter difficulty meeting market demand, quality standards or physician expectations, our reputation will be harmed and negatively affect our business, financial condition and results of operations.

We expect to continue to incur net losses for the next several years and we expect to require substantial additional capital beyond the proceeds of this offering to finance our planned operations, which may include future equity and debt financings. This additional capital may not be available to us on acceptable terms or at all. Our failure to obtain additional financing when needed on acceptable terms, or at all, could force us to delay, limit, reduce or eliminate our commercialization, sales and marketing efforts, product development programs or other operations.

Since inception, we have incurred significant net losses and expect to continue to incur net losses for the foreseeable future. Since our inception, our operations have been financed primarily through private placements of equity securities, debt financing arrangements and sales of our products. As of December 31, 2019, we had $28.3 million in cash, cash equivalents and short-term marketable securities, and an accumulated deficit of $210.5 million. Based on our current planned operations, we expect our cash and cash equivalents, together with available borrowings under the CIBC Agreement and the proceeds from this offering, will enable us to fund our operating expenses for at least the next twelve months. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

We expect to continue to make substantial investments in clinical trials that are designed to provide clinical evidence of the safety and efficacy of our solution. We intend to continue to make significant investments in our sales and marketing organization by increasing the number of U.S. sales territory managers and expanding our international

sales and marketing programs to help promote awareness and increase adoption of our solution primarily among the approximately 800 pulmonologists performing interventional pulmonary procedures across approximately 500 high volume hospitals. In order to continue to grow our business, we will need to hire additional sales personnel to efficiently serve the market. We also expect to continue to make investments in research and development, regulatory affairs and clinical studies to develop future generations of our solution, broaden the addressable market and expand indications, support regulatory submissions and demonstrate the clinical efficacy of our solution. Moreover, we expect to incur additional expenses associated with operating as a public company, including legal, accounting, insurance, exchange listing and Securities and Exchange Commission (SEC) compliance, investor relations and other expenses. Because of these and other factors, we expect to continue to incur substantial net losses and negative cash flows from operations for the foreseeable future. Our future capital requirements will depend on many factors, including:

- the cost, timing and results of our clinical trials and regulatory reviews;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- the terms and timing of any other collaborative, licensing and other arrangements that we may establish;
- the timing, receipt and amount of sales from our current solution and potential future products;
- the degree of success we experience in continuing to commercialize our solution;
- the emergence of competing or complementary technologies;
- the cost of preparing, filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights; and
- the extent to which we acquire or invest in businesses, products or technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

We will require additional financing to fund working capital and pay our obligations. We may seek to raise any necessary additional capital through a combination of public or private equity offerings or debt financings. There can be no assurance that we will be successful in acquiring additional funding at levels sufficient to fund our operations or on terms favorable to us. If adequate funds are not available on acceptable terms when needed, we may be required to significantly reduce operating expenses, which may negatively affect our business, financial condition and results of operations. If we do raise additional capital through public or private equity or convertible debt offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Additional capital may not be available on reasonable terms, or at all.

If the quality of our solution does not meet the expectations of physicians or patients, then our business and reputation may be harmed.

In the course of conducting our business, we must adequately address quality issues that may arise with our solution, including defects in third-party components included in our solution. Although we have established internal procedures designed to minimize risks that may arise from quality issues, there can be no assurance that we will be able to eliminate or mitigate occurrences of these issues and associated liabilities. In addition, even in the absence of quality issues, we may be subject to claims and liability if the performance of the Zephyr Valves does not live up to the expectations of physicians or patients as a result of the physician's implantation of the valve. For example, a physician may improperly implant the Zephyr Valve. If the quality of our solution does not meet the expectations of physicians or patients, then our business and reputation with those physicians or patients may negatively affect our business, financial condition and results of operations.

If our facilities become damaged or inoperable, we will be unable to continue to research, develop and supply our solution which could negatively affect our business, financial condition and results of operations until we are able to secure a new facility and rebuild our inventory.

We do not have redundant facilities. We perform substantially all of our manufacturing, research and development and back office activity and maintain all our finished goods inventory in a single location in Redwood City, California. Our facility, equipment and inventory would be costly to replace and could require substantial lead time to repair or replace. The facility will be harmed or rendered inoperable by natural or man-made disasters, including, but not limited to, earthquakes, flooding, fire and power outages, which may render it difficult or impossible for us to perform our research, development and commercialization activities for some period of time. The inability to perform those activities, combined with the time it may take to rebuild our manufacturing capabilities, inventory of finished product, may result in the loss of customers or harm to our reputation. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and this insurance may not continue to be available to us on acceptable terms, or at all.

Performance issues, service interruptions or price increases by our shipping carriers could negatively affect our business, financial condition and results of operations and harm our reputation and the relationship between us and the hospitals with which we work.

Expedited, reliable shipping is essential to our operations. We rely heavily on providers of transport services for reliable and secure point-to-point transport of the Zephyr Valve and Chartis System to our customers and for tracking of these shipments. Should a carrier encounter delivery performance issues such as loss, damage or destruction of any systems, it would be costly to replace such systems in a timely manner and such occurrences may damage our reputation and lead to decreased demand for our solution and increased cost and expense to our business. In addition, any significant increase in shipping rates could adversely affect our operating margins and results of operations. Similarly, strikes, severe weather, natural disasters or other service interruptions affecting delivery services we use would adversely affect our ability to process orders for the Zephyr Valve on a timely basis.

We depend on our senior management team and the loss of one or more key employees or an inability to attract and retain highly skilled employees will negatively affect our business, financial condition and results of operations.

Our success depends in part on our continued ability to attract, retain and motivate highly qualified management, clinical and other personnel. We are highly dependent upon our management team, particularly our Chief Executive Officer, and the rest of our senior management, and other key personnel. Although we have entered into employment letter agreements with all of our executive officers, each of them may terminate their employment with us at any time. The replacement of any of our key personnel likely would involve significant time and costs and may significantly delay or prevent the achievement of our business objectives and could therefore negatively affect our business, financial condition and results of operations. In addition, we do not carry any key person insurance policies that could offset potential loss of service under applicable circumstances.

In addition, our research and development programs and clinical operations depend on our ability to attract and retain highly skilled engineers and medical researchers. We may not be able to attract or retain qualified engineers and medical researchers in the future due to the competition for qualified personnel. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than us. If we hire employees from competitors or other companies, their former employers may attempt to assert that these employees or we have breached legal obligations, resulting in a diversion of our time and resources and, potentially, damages.

In addition, job candidates and existing employees, particularly in the San Francisco Bay Area, often consider the value of the stock awards they receive in connection with their employment. If the perceived value of our stock awards declines, it may harm our ability to recruit and retain highly skilled employees. Many of our employees have become or will soon become vested in a substantial amount of our common stock or a number of common stock

options. Our employees may be more likely to leave us if the shares they own have significantly appreciated in value relative to the original purchase prices of the shares, or if the exercise prices of the options that they hold are significantly below the market price of our common stock, particularly after the expiration of the lock-up agreements described herein. Our future success also depends on our ability to continue to attract and retain additional executive officers and other key employees. If we fail to attract new personnel or fail to retain and motivate our current personnel, it will negatively affect our business, financial condition and results of operations.

We have significant international operations, and to successfully market and sell our products in such international markets we must address international business risks with which we have limited experience.

Sales in markets outside of the United States accounted for approximately 67.2% of our revenue for the year ended December 31, 2019. We currently focus our international sales and marketing efforts in Australia, Austria, China, France, Germany, Italy, the Netherlands, South Korea, Spain, Switzerland and the United Kingdom. International sales are subject to a number of risks, including:

- difficulties in staffing and managing our international operations;
- increased competition as a result of more products and procedures receiving regulatory approval or otherwise free to market in international markets;
- longer accounts receivable payment cycles and difficulties in collecting accounts receivable;
- reduced or varied protection for intellectual property rights in some countries;
- export restrictions, trade regulations and foreign tax laws;
- fluctuations in currency exchange rates;
- foreign certification and regulatory clearance or approval requirements;
- difficulties in developing effective marketing campaigns in unfamiliar foreign countries;
- customs clearance and shipping delays;
- political, social, and economic instability abroad, global health epidemics or other contagious diseases, terrorist attacks and security concerns in general;
- preference for locally produced products;
- potentially adverse tax consequences, including the complexities of foreign value-added tax systems, tax inefficiencies related to our corporate structure, and restrictions on the repatriation of earnings;
- differing payment and reimbursement regimes;
- the burdens of complying with a wide variety of foreign laws and different legal standards; and
- increased financial accounting and reporting burdens and complexities.

For example, the recent widespread outbreak of respiratory illness caused by a strain of coronavirus first identified in Wuhan, Hubei Province, China has significantly decreased and may continue to have a significant negative impact on the sale of our products and number of patients treated with our products in China and regions affected by the outbreak. This has also resulted in disruptions or restrictions on physicians, hospitals and other healthcare providers from treating patients that are eligible for our products due to the uncertain health effects of the coronavirus on the respiratory system and resources that are diverted to prioritize treatment and containment of the

coronavirus outbreak. The outbreak has also resulted in business closures and disruptions that may continue to affect various suppliers of ancillary products used in the delivery of our product (e.g. gowns, face masks or gloves), including disruptions and restrictions on transportation of our products and could result in significant delays. In addition, a significant outbreak of coronavirus and other contagious diseases could result in a widespread health crisis that could adversely affect the economies and financial markets worldwide, resulting in an economic downturn that could affect demand for our products and impact our business, financial condition and results of operations.

If one or more of these risks are realized, it will negatively affect our business, financial condition and results of operations.

Our history of recurring losses and anticipated expenditures raise substantial doubts about our ability to continue as a going concern. Our ability to continue as a going concern requires that we obtain sufficient funding to finance our operations.

We have incurred operating losses to date and it is possible we will never generate profit. We have concluded that substantial doubt exists regarding our ability to continue as a going concern. Our audited financial statements appearing at the end of this prospectus have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. These financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of these uncertainties related to our ability to operate on a going concern basis.

The report of our independent registered public accounting firm on our consolidated financial statements as of and for the year ended December 31, 2019 includes an explanatory paragraph indicating that there is substantial doubt about our ability to continue as a going concern. If we are unable to raise sufficient capital when needed, our business, financial condition and results of operations will be materially and adversely affected, and we will need to significantly modify our operational plans to continue as a going concern. If we are unable to continue as a going concern, we might have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements. The inclusion of a going concern explanatory paragraph by our auditors, our lack of cash resources and our potential inability to continue as a going concern may materially adversely affect our share price and our ability to raise new capital or to enter into critical contractual relations with third parties due to concerns about our ability to meet our contractual obligations.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or the physicians who use our solution and the patients they treat, or prevent us from assessing critical information and expose us to liability, which could negatively affect our business, financial condition and results of operations and our reputation.

In the ordinary course of our business, we may become exposed to, or collect and store sensitive data, including procedure-based information and legally PHI, credit card, and other financial information, insurance information, and other potentially personally identifiable information. For example, we may fail to remove all PHI from CT scan data on the StratX Platform. We also store sensitive intellectual property and other proprietary business information. Although we are in the process of implementing policies and procedures designed to ensure compliance with applicable data security and privacy-related laws and regulations and we take measures to protect sensitive information from unauthorized access or disclosure, our information technology (IT) and infrastructure, and other technology partners and providers, may be vulnerable to cyber-attacks by hackers or viruses or breaches due to employee error, malfeasance or other disruptions. We rely extensively on IT systems, networks and services, including internet sites, data hosting and processing facilities and tools, physical security systems and other hardware, software and technical applications and platforms, some of which are managed, hosted, provided or used by third-parties or their vendors, to assist in conducting our business. A significant breakdown, invasion, corruption, destruction or interruption of critical information technology systems or infrastructure, by our workforce, others with authorized access to our systems or unauthorized persons could negatively impact operations. The use of cloud-based computing creates opportunities for the unintentional dissemination or intentional destruction of confidential information stored in our or our third-party providers' systems, portable media or storage devices. We could also

experience a business interruption, theft of confidential information or reputational damage from industrial espionage attacks, malware or other cyber-attacks, which may compromise our system infrastructure or lead to data leakage, either internally or at our third-party providers and we do not carry cyber insurance, which may expose us to certain potential losses for damages or result in penalization with fines in an amount exceeding our resources. Although the aggregate impact on our operations and financial condition has not been material to date, we have occasionally been the target of events of this nature and expect them to continue as cybersecurity threats have been rapidly evolving in sophistication and becoming more prevalent in the industry. We are investing in protections and monitoring practices of our data and IT to reduce these risks and continue to monitor our systems on an ongoing basis for any current or potential threats. We cannot assure you, however, that our efforts will prevent breakdowns or breaches to our or our third-party providers' databases or systems, and such breakdowns and breaches could negatively affect our business, financial condition and results of operations and our reputation.

We may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships with third parties that may not result in the development of commercially viable products, product improvements or the generation of significant future revenues.

In the ordinary course of our business, we may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances, partnerships or other arrangements to develop new products or product improvements and to pursue new markets. Proposing, negotiating and implementing collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships may be a lengthy and complex process. Other companies, including those with substantially greater financial, marketing, sales, technology or other business resources, may compete with us for these opportunities or arrangements. We may not identify, secure, or complete any such transactions or arrangements in a timely manner, on a cost-effective basis, on acceptable terms or at all. We have limited institutional knowledge and experience with respect to these business development activities, and we may also not realize the anticipated benefits of any such transaction or arrangement. In particular, these collaborations may not result in the development of products that achieve commercial success or viable product improvements or result in significant revenues and could be terminated prior to developing any products.

Additionally, we may not be in a position to exercise sole decision making authority regarding the transaction or arrangement, which could create the potential risk of creating impasses on decisions, and our future collaborators may have economic or business interests or goals that are, or that may become, inconsistent with our business interests or goals. It is possible that conflicts may arise with our collaborators, such as conflicts concerning the achievement of performance milestones, or the interpretation of significant terms under any agreement, such as those related to financial obligations or the ownership or control of intellectual property developed during the collaboration. If any conflicts arise with any future collaborators, they may act in their self-interest, which may be adverse to our best interest, and they may breach their obligations to us. In addition, we may have limited control over the amount and timing of resources that any future collaborators devote to our or their future products.

Disputes between us and our collaborators may result in litigation or arbitration which would increase our expenses and divert the attention of our management. Further, these transactions and arrangements will be contractual in nature and will generally be terminable under the terms of the applicable agreements and, in such event, we may not continue to have rights to the products relating to such transaction or arrangement or may need to purchase such rights at a premium. If we enter into in-bound intellectual property license agreements, we may not be able to fully protect the licensed intellectual property rights or maintain those licenses. Future licensors could retain the right to prosecute and defend the intellectual property rights licensed to us, in which case we would depend on the ability of our licensors to obtain, maintain and enforce intellectual property protection for the licensed intellectual property. These licensors may determine not to pursue litigation against other companies or may pursue such litigation less aggressively than we would. Further, entering into such license agreements could impose various diligence, commercialization, royalty or other obligations on us. Future licensors may allege that we have breached our license agreement with them, and accordingly seek to terminate our license, which could adversely affect our competitive business position and harm our business prospects.

Unfavorable global economic conditions could negatively affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn, such as the global financial crisis of 2008, could result in a variety of risks to our business, including weakened demand for our solution, and our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption, or cause our customers to delay making payments for our services. Any of the foregoing will negatively affect our business, financial condition and results of operations and we cannot anticipate all of the ways in which the economic climate and financial market conditions could negatively affect our business, financial condition and results of operations.

We may acquire other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders and otherwise negatively affect our business, financial condition and results of operations.

We may in the future seek to acquire or invest in businesses, applications or technologies that we believe could complement or expand our current business, enhance our technical capabilities or otherwise offer growth opportunities. Accordingly, although we have no current commitments with respect to any acquisition or investment, we may in the future pursue the acquisition of, or joint ventures relating to, complementary businesses, applications or technologies instead of developing them ourselves. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated. We may not be able to identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain the expected benefits of any acquisition or investment.

We may not be able to successfully integrate acquired personnel, operations and technologies, or effectively manage the combined business following an acquisition. Acquisitions could also result in dilutive issuances of equity securities, the use of our available cash, or the incurrence of debt, which will harm our operating results. In addition, if an acquired business fails to meet our expectations, it will negatively affect our business, financial condition and results of operations.

Consolidation in the healthcare industry or group purchasing organizations could lead to demands for price concessions, which may affect our ability to sell our products at prices necessary to support our current business strategies.

The commercial payor industry is undergoing significant consolidation. When payors combine their operations, the combined company may elect to reimburse our products at the lowest rate paid by any of the participants in the consolidation or use its increased size to negotiate reduced rates. If one of the payors participating in the consolidation does not reimburse for the Zephyr Valve and our solution at all, the combined company may elect not to reimburse for the same, which would adversely impact our operating results.

Our long-term growth depends on our ability to enhance our solution, expand our indications and develop and commercialize additional products. If we fail to identify, acquire and develop other products, we may be unable to grow our business.

It is important to our business that we continue to enhance the Zephyr Valve, Chartis System and StratX Platform and develop and introduce new products. Developing products is expensive and time-consuming and could divert management's attention away from our core business. The success of any new product offering or product enhancements to our solution will depend on several factors, including our ability to:

- assemble sufficient resources to acquire or discover additional products;
- properly identify and anticipate physician and patient needs;

- develop and introduce new products and product enhancements in a timely manner;
- avoid infringing upon the intellectual property rights of third parties;
- demonstrate, if required, the safety and efficacy of new products with data from pre-clinical studies and clinical trials;
- obtain the necessary regulatory clearances or approvals for expanded indications, new products or product modifications;
- be fully FDA-compliant with marketing of new devices or modified products;
- produce new products in commercial quantities at an acceptable cost;
- provide adequate training to potential users of our products;
- receive adequate coverage and reimbursement for procedures performed with our products; and
- develop an effective and dedicated sales and marketing team.

If we are not successful in expanding our indications and developing and commercializing new products and product enhancements, our ability to increase our revenue may be impaired, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, we may choose to focus our efforts and resources on a potential products or indication that ultimately prove to be unsuccessful, or to license or purchase a marketed product that does not meet our financial expectations. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other potential products or other diseases that may later prove to have greater commercial potential, or relinquish valuable rights to such potential products through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to retain sole development and commercialization rights, which could adversely impact our business, financial condition and results of operations.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on research programs and products and product candidates that we identify for specific indications. As a result, we may forego or delay pursuit of opportunities with other products or product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to timely capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and products and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product or product candidate, we may relinquish valuable rights to that product or product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

We are subject to anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could negatively affect our business, financial condition and results of operations.

As we grow our international presence and global operations, we will be increasingly exposed to trade and economic sanctions and other restrictions imposed by the United States, the European Union and other governments and organizations. The U.S. Departments of Justice, Commerce, State and Treasury and other federal agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against corporations and individuals for violations of economic sanctions laws, export control laws, the U.S. Foreign Corrupt Practices Act (FCPA), and other federal statutes and regulations, including those established by the Office of Foreign Assets Control (OFAC). In addition, the U.K. Bribery Act of 2010 (Bribery Act) prohibits both domestic and international bribery, as well as bribery across both private and public sectors. An organization that fails to prevent bribery by anyone associated with the organization can be charged under the Bribery Act unless the organization can establish the defense of having implemented adequate procedures to prevent bribery. Under these laws and regulations, as well as other anti-corruption laws, anti-money laundering laws, export control laws, customs laws, sanctions laws and other laws governing our operations, various government agencies may require export licenses, may seek to impose modifications to business practices, including cessation of business activities in sanctioned countries or with sanctioned persons or entities and modifications to compliance programs, which may increase compliance costs, and may subject us to fines, penalties and other sanctions. A violation of these laws or regulations would negatively affect our business, financial condition and results of operations.

We are in the process of enhancing policies and procedures designed to ensure compliance by us and our directors, officers, employees, representatives, consultants and agents with the FCPA, OFAC restrictions, the Bribery Act and other export control, anti-corruption, anti-money-laundering and anti-terrorism laws and regulations. We cannot assure you, however, that our policies and procedures are or will be sufficient or that directors, officers, employees, representatives, consultants and agents have not engaged and will not engage in conduct for which we may be held responsible, nor can we assure you that our business partners have not engaged and will not engage in conduct that could materially affect their ability to perform their contractual obligations to us or even result in our being held liable for such conduct. Violations of the FCPA, OFAC restrictions, the Bribery Act or other export control, anti-corruption, anti-money laundering and anti-terrorism laws or regulations may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, financial condition and results of operations.

Our results may be impacted by changes in foreign currency exchange rates.

A significant proportion of our sales are outside of the United States, and a majority of those are denominated in foreign currencies, which exposes us to foreign currency risks, including changes in currency exchange rates. We do not currently engage in any hedging transactions. If we are unable to address these risks and challenges effectively, our international operations may not be successful, and our business could be harmed.

Our ability to utilize our net operating loss carryforwards and research and development credit may be limited.

In general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (Code) a corporation that undergoes an ownership change, generally defined as a greater than 50% change by value in its equity ownership over a three-year period, is subject to limitations on its ability to utilize its pre-change net operating losses (NOLs) and its research and development credit carryforwards to offset future taxable income. Our existing NOLs and research and development credit carryforwards may be subject to limitations arising from previous ownership changes, and if we undergo an ownership change, our ability to utilize NOLs and research and development credit carryforwards could be further limited by Sections 382 and 383 of the Code. In addition, our ability to deduct net interest expense may be limited if we have insufficient taxable income for the year during which the interest is incurred, and any carryovers of such disallowed interest would be subject to the limitation rules similar to those applicable to NOLs and other attributes. Future changes in our stock ownership, some of which might be beyond our

control, could result in an ownership change under Section 382 of the Code. For these reasons, in the event we experience a change of control, we may not be able to utilize a material portion of the NOLs, research and development credit carryforwards or disallowed interest expense carryovers, even if we attain profitability.

We may not be able to achieve or maintain satisfactory pricing and margins for our products.

Manufacturers of medical devices have a history of price competition, and we can give no assurance that we will be able to achieve satisfactory prices for our solution or maintain prices at the levels we have historically achieved. Any decline in the amount that payers reimburse our customers for the Zephyr Valve and related products could make it difficult for customers to continue using, or to adopt, our solution and could create additional pricing pressure for us. If we are forced to lower the price we charge for our solution, our gross margins will decrease, which will adversely affect our ability to invest in and grow our business. If we are unable to maintain our prices, or if our costs increase and we are unable to offset such increase with an increase in our prices, our margins could erode. We will continue to be subject to significant pricing pressure, which will negatively affect our business, financial condition and results of operations.

Governmental export or import controls could limit our ability to compete in foreign markets and subject us to liability if we violate them.

Our products may be subject to U.S. export controls. Governmental regulation of the import or export of our products, or our failure to obtain any required import or export authorization for our products, when applicable, will harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our products may create delays in the introduction of our products in international markets or, in some cases, prevent the export of our products to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, we may be fined or other penalties could be imposed, including a denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export our products to existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell access to our products would likely negatively affect our business, financial condition and results of operations.

Risks Related to Government Regulation and Our Industry

Our products and operations are subject to extensive government regulation and oversight both in the United States and abroad. If we fail to obtain and maintain necessary regulatory approvals for the Zephyr Valve and related products, or if approvals for future products and indications are delayed or not issued, it will negatively affect our business, financial condition and results of operations.

The Zephyr Valve is subject to extensive regulation by the FDA in the United States and by our Notified Body in the European Union. Government regulations specific to medical devices are wide ranging and govern, among other things:

- product design, development, manufacture, and release;
- laboratory, pre-clinical and clinical testing, labeling, packaging, storage and distribution;
- product safety and efficacy;
- premarketing clearance or approval;
- service operations;

- record keeping;
- product marketing, promotion and advertising, sales and distribution;
- post-marketing surveillance, including reporting of deaths or serious injuries and recalls and correction and removals;
- post-market approval studies; and
- product import and export.

Before a new medical device or service, or a new intended use for an existing product or service, can be marketed in the United States, a company must first submit and receive either 510(k) clearance or PMA from the FDA, unless an exemption applies. In the 510(k) clearance process, before a device may be marketed, the FDA must determine that a proposed device is substantially equivalent to a legally-marketed predicate device, which includes a device that has been previously cleared through the 510(k) process, a device that was legally marketed prior to May 28, 1976 (pre-amendments device), a device that was originally on the U.S. market pursuant to an approved PMA and later down-classified, or a 510(k)-exempt device. To be substantially equivalent, the proposed device must have the same intended use as the predicate device, and either have the same technological characteristics as the predicate device or have different technological characteristics and not raise different questions of safety or effectiveness than the predicate device. Clinical data are sometimes required to support substantial equivalence.

In the process of obtaining PMA approval, which was required for the Zephyr Valve, the FDA must determine that a proposed device is safe and effective for its intended use based, in part, on extensive data, including, but not limited to, technical, pre-clinical, clinical trial, manufacturing and labeling data. The PMA process is typically required for devices that are deemed to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices.

Either the 510(k) or PMA process can be expensive, lengthy and unpredictable. We may not be able to obtain any necessary clearances or approval or may be unduly delayed in doing so, which will negatively affect our business, financial condition and results of operations. Furthermore, even if we are granted regulatory clearances or approvals, they may include significant limitations on the indicated uses for the product, which may limit the market for the product. Although we have obtained PMA approval to market the Zephyr Valve, our approval can be revoked if safety or efficacy problems develop.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- our inability to demonstrate to the satisfaction of the FDA or the applicable regulatory entity or notified body that our products are safe or effective for their intended uses;
- the disagreement of the FDA or the applicable foreign regulatory body with the design or implementation of our clinical trials or the interpretation of data from pre-clinical studies or clinical trials;
- serious and unexpected adverse device effects experienced by participants in our clinical trials;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required;
- our inability to demonstrate that the clinical and other benefits of the device outweigh the risks;
- the manufacturing process or facilities we use may not meet applicable requirements; and
- the potential for approval policies or regulations of the FDA or applicable foreign regulatory bodies to change significantly in a manner rendering our clinical data or regulatory filings insufficient for clearance or approval.

In order to sell our products in member countries of the European Economic Area (EEA), our products must comply with the essential requirements of the European Union Medical Devices Directive (Council Directive 93/42/EEC) (MDD) and the Active Implantable Medical Devices Directive (Council Directive 90/385/EEC). Compliance with these requirements is a prerequisite to be able to affix the Conformité Européene (CE) mark to our products, without which they cannot be sold or marketed in the EEA. To demonstrate compliance with the essential requirements we must undergo a conformity assessment procedure, which varies according to the type of medical device and its classification. Except for low-risk medical devices (Class I non-sterile, non-measuring devices), where the manufacturer can issue an European Commission Declaration of Conformity based on a self-assessment of the conformity of its products with the essential requirements of the MDD, a conformity assessment procedure requires the intervention by a Notified Body. Depending on the relevant conformity assessment procedure, the Notified Body would typically audit and examine the technical file and the quality system for the manufacture, design and final inspection of our devices. The Notified Body issues a certificate of conformity following successful completion of a conformity assessment procedure conducted in relation to the medical device and its manufacturer and their conformity with the essential requirements. This certificate entitles the manufacturer to affix the CE mark to its medical devices after having prepared and signed a related EC Declaration of Conformity. If we fail to remain in compliance with applicable European laws and directives, we would be unable to continue to affix the CE mark to our products, which would prevent us from selling them within the EEA.

The FDA and state and international authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by any such agency, which may include any of the following sanctions:

- adverse publicity, warning letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recall or seizure of our products;
- operating restrictions, partial suspension or total shutdown of production;
- denial of our requests for regulatory clearance or premarket approval of new products or services, new intended uses or modifications to existing products or services;
- withdrawal of regulatory clearance or premarket approvals that have already been granted; or
- criminal prosecution.

If any of these events were to occur, it will negatively affect our business, financial condition and results of operations.

Changes in the regulatory environment may constrain or require us to restructure our operations, which may harm our revenue and operating results.

Healthcare laws and regulations change frequently and may change significantly in the future. We may not be able to adapt our operations to address every new regulation, and new regulations may negatively affect our business, financial condition and results of operations. We cannot assure you that a review of our business by courts or regulatory authorities would not result in a determination that adversely affects our revenue and operating results, or that the healthcare regulatory environment will not change in a way that restricts our operations. In addition, there is risk that the U.S. Congress may implement changes in laws and regulations governing healthcare service providers, including measures to control costs, or reductions in reimbursement levels, which may negatively affect our business, financial condition and results of operations.

The federal government is considering ways to change, and has changed, the manner in which healthcare services are paid for in the United States. CMS establishes Medicare payment levels for hospitals and physicians on an annual basis, which can increase or decrease payment to such entities. CMS, as well as insurers, have increased their efforts to control the cost, utilization and delivery of healthcare services. From time to time, the U.S. Congress has

considered and implemented changes in the CMS fee schedules in conjunction with budgetary legislation. Further reductions of reimbursement by CMS for services or changes in policy regarding coverage of tests or other services provided or other requirements for payment, such as prior authorization or a physician's or qualified practitioner's signature on test/service requisitions, may be implemented from time to time. Individual states may also enact legislation that impacts Medicaid payments to hospitals and physicians. Reductions in the reimbursement rates and changes in payment policies of other third-party payors may occur as well. Similar changes in the past have resulted in reduced payments as well as added costs and have added more complex regulatory and administrative requirements. Further changes in federal, state, local and third-party payor regulations or policies may negatively affect our business, financial condition and results of operations. Actions by agencies regulating insurance or changes in other laws, regulations, or policies may also negatively affect our business, financial condition and results of operations.

On April 5, 2017, the European Parliament passed the Medical Devices Regulation (Regulation 2017/745), which repeals and replaces the MDD and the Active Implantable Medical Devices Directive. Unlike directives, which must be implemented into the national laws of the EEA member states, the regulations would be directly applicable, i.e., without the need for adoption of EEA member state laws implementing them, in all EEA member states and are intended to eliminate current differences in the regulation of medical devices among EEA member States. The Medical Devices Regulation, among other things, is intended to establish a uniform, transparent, predictable and sustainable regulatory framework across the EEA for medical devices and ensure a high level of safety and health while supporting innovation.

The Medical Devices Regulation will become applicable in 2020. Once applicable, the new regulations will among other things:

- strengthen the rules on placing devices on the market and reinforce surveillance once they are available;
- establish explicit provisions on manufacturers' responsibilities for the follow-up of the quality, performance and safety of devices placed on the market;
- improve the traceability of medical devices throughout the supply chain to the end-user or patient through a unique identification number;
- set up a central database to provide patients, healthcare professionals and the public with comprehensive information on products available in the European Union; and
- strengthen rules for the assessment of certain high-risk devices, such as implants, which may have to undergo an additional check by experts before they are placed on the market.

These modifications may have an effect on the way we conduct our business in the EEA.

A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products that leads to corrective actions, could have a significant adverse impact on us.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture of a product or in the event that a product poses an unacceptable risk to health. The FDA's authority to require a recall must be based on an FDA finding that there is reasonable probability that the device would cause serious injury or death. Manufacturers may also, under their own initiative, recall a product if any material deficiency in a device is found or withdraw a product to improve device performance or for other reasons. The FDA requires that certain classifications of recalls be reported to the FDA within ten working days after the recall is initiated. A government-mandated or voluntary recall by us could occur as a result of an unacceptable risk to health, component failures, malfunctions, manufacturing errors, design or labeling defects or other deficiencies and issues. Similar regulatory agencies in other countries have similar authority to recall devices because of material deficiencies or defects in design or manufacture that could

endanger health. Any recall would divert management attention and financial resources and could cause the price of our stock to decline, expose us to product liability or other claims and harm our reputation with customers. A future recall announcement will harm our reputation with customers and negatively affect our sales. In addition, the FDA or a foreign governmental authority could take enforcement action for failing to report the recalls when they were conducted.

In addition, under the FDA's medical device reporting regulations (MDRs), we are required to report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. Repeated product malfunctions may result in a voluntary or involuntary product recall. We are also required to follow detailed recordkeeping requirements for all firm-initiated medical device corrections and removals, and to report such corrective and removal actions to FDA if they are carried out in response to a risk to health and have not otherwise been reported under the MDRs. Depending on the corrective action we take to redress a product's deficiencies or defects, the FDA may require, or we may decide, that we will need to obtain new approvals or clearances for the device before we may market or distribute the corrected device. Seeking such approvals or clearances may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory enforcement action, including FDA warning letters, product seizure, injunctions, administrative penalties, or civil or criminal fines. We may also be required to bear other costs or take other actions that may have a negative impact on our sales as well as face significant adverse publicity or regulatory consequences, which will negatively affect our business, financial condition and results of operations, including our ability to market our products in the future.

Any adverse event involving our products, whether in the United States or abroad, could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

We are subject to certain federal, state and foreign fraud and abuse laws, health information privacy and security laws and transparency laws, which, if violated, could subject us to substantial penalties and negatively affect our business, financial condition and results of operations.

The products and services we offer are highly regulated, and there can be no assurance that the regulatory environment in which we operate will not change significantly and adversely in the future. Our arrangements with physicians, hospitals and clinics may expose us to broadly applicable fraud and abuse and other laws and regulations that may restrict the financial arrangements and relationships through which we market, sell and distribute our products and services. Federal and state healthcare laws and regulations that may affect our ability to conduct business, include, without limitation:

- federal and state laws and regulations regarding billing and claims payment applicable to our solution and regulatory agencies enforcing those laws and regulations;

- the federal Anti-Kickback Statute, which prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs, such as Medicare and Medicaid;

- the federal false claims laws, including the False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, false claims, or knowingly using false statements, to obtain payment from the federal government;

- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- the federal Physician Payments Sunshine Act (Open Payments), created under the Patient Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the Affordable Care Act) and its implementing regulations, which requires certain manufacturers of drugs, medical devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to CMS, information related to payments or other transfers of value made to licensed physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;

- the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH), and its implementing regulations, which impose certain requirements relating to the privacy, security and transmission of individually identifiable health information on covered entities, including certain healthcare providers, health plans and healthcare clearinghouses, and their respective business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity; HIPAA also created criminal liability for knowingly and willfully falsifying or concealing a material fact or making a materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

- the Federal Drug & Cosmetic Act (FDCA), which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;

- the federal physician self-referral prohibition, commonly known as the Stark Law;

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts; and

- similar healthcare laws and regulations in the European Union and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of certain protected information, such as the General Data Protection Regulation (GDPR), which imposes obligations and restrictions on the collection and use of personal data relating to individuals located in the European Union (including health data).

The Affordable Care Act was enacted in 2010. The Affordable Care Act, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statutes, including those created under HIPAA. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

To enforce compliance with the healthcare regulatory laws, certain enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Responding to investigations can be time and resource-consuming and can divert management's attention from the business. Additionally, as a result of these investigations, healthcare providers and entities may have to agree to additional compliance and reporting requirements as part of a consent decree or corporate integrity agreement. Any such investigation or settlement could increase our costs or otherwise negatively affect our business, financial condition and results of operations. Even an unsuccessful challenge or investigation into our practices could cause adverse publicity and be costly to respond to.

Although we have adopted policies and procedures designed to comply with these laws and regulations and conduct internal reviews of our compliance with these laws, our activities, including those relating to the reporting of discount and rebate information and other information affecting federal, state and third-party reimbursement of our products (such as our patient reimbursement support program) and the sale and marketing of our products, may be subject to scrutiny by under these laws. Because of the breadth of these laws and the narrowness of available statutory exceptions and regulatory safe harbors, it is possible that some of our activities could be subject to challenge under one or more such laws. The growth of our business and sales organization and our expansion outside of the United States may increase the potential of violating these laws or our internal policies and procedures. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the federal, state and foreign laws described above or any other current or future fraud and abuse or other healthcare laws and regulations that apply to us, we may be subject to significant penalties, including significant criminal, civil, and administrative penalties, damages, fines, imprisonment, for individuals, exclusion from participation in government programs, such as Medicare and Medicaid, imprisonment, contractual damages, reputation harm and disgorgement and we could be required to curtail or cease our operations. Any of the foregoing consequences will negatively affect our business, financial condition and results of operations.

If we modify the Zephyr Valve, we may need to seek additional clearances or approvals, which, if not granted, would prevent us from selling our modified products.

In the United States, the Zephyr Valve is marketed pursuant to a PMA order issued by the FDA. Any modifications to a PMA-approved device that could significantly affect its safety or effectiveness, including significant design and manufacturing changes, or that would constitute a major change in its intended use, manufacture, design, components, or technology requires approval of a new PMA application or PMA supplement. However, certain changes to a PMA-approved device do not require submission and approval of a new PMA or PMA supplement and may only require notice to FDA in a PMA 30-Day Notice, Special PMA Supplement - Changes Being Effected or PMA Annual Report. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer's decision. The FDA may not agree with our decisions regarding whether new approvals are necessary. If the FDA disagrees with our determination and requires us to seek new PMA approvals for modifications to our previously approved products for which we have concluded that new approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties. Furthermore, our products could be subject to recall if the FDA determines, for any reason, that our products are not safe or effective or that appropriate regulatory submissions were not made. Delays in receipt or failure to receive approvals, the loss of previously received approvals, or the failure to comply with any other existing or future regulatory requirements, could reduce our sales, profitability and future growth prospects.

Failure to comply with post-marketing regulatory requirements could subject us to enforcement actions, including substantial penalties, and might require us to recall or withdraw a product from the market.

Even though we have obtained approval for the Zephyr Valve, we are subject to ongoing and pervasive regulatory requirements governing, among other things, the manufacture, marketing, advertising, medical device reporting, sale, promotion, registration, and listing of devices. For example, we must submit periodic reports to the FDA as a condition of PMA approval. These reports include safety and effectiveness information about the device after its approval. Failure to submit such reports, or failure to submit the reports in a timely manner, could result in enforcement action by the FDA. Following its review of the periodic reports, the FDA might ask for additional information or initiate further investigation.

In addition, the PMA approval for the Zephyr Valve was subject to several conditions of approval, including extended follow-up of the pre-market study cohort and post market study. Though we believe we have complied with these conditions to date, any failure to comply with the conditions of approval could result in the withdrawal of PMA approval and the inability to continue to market the device. Failure to conduct the required studies in

accordance with Institutional Review Board (IRB) and informed consent requirements, or adverse findings in these studies, could also be grounds for withdrawal of approval of the PMA.

The regulations to which we are subject are complex and have become more stringent over time. Regulatory changes could result in restrictions on our ability to continue or expand our operations, higher than anticipated costs, or lower than anticipated sales. Even after we have obtained the proper regulatory approval to market a device, we have ongoing responsibilities under FDA regulations and applicable foreign laws and regulations. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA, state or foreign regulatory authorities, which will negatively affect our business, financial condition and results of operations.

If treatment guidelines for severe emphysema or the standard of care evolves, we may need to redesign and seek new marketing authorization from the FDA for one or more of our products.

If treatment guidelines for severe emphysema changes or the standard of care for this condition evolves, we may need to redesign the applicable product and seek new approvals from the FDA. Our PMA approvals from the FDA are based on current treatment guidelines. If treatment guidelines change so that different treatments become desirable, the clinical utility of one or more of our products could be diminished and will negatively affect our business, financial condition and results of operations.

If we or our suppliers fail to comply with the FDA's QSR or the European Union Medical Devices Directive, our manufacturing or distribution operations could be delayed or shut down and our revenue could suffer.

Our manufacturing and design processes and those of our third-party suppliers are required to comply with the FDA's QSR and the European Union Medical Devices Directive (Council Directive 93/42/EEC) (MDD), both of which cover procedures and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of Zephyr Valves. We are also subject to similar state requirements and licenses, and to ongoing International Organization for Standardization (ISO) compliance in all operations, including design, manufacturing, and service, to maintain our CE Mark. In addition, we must engage in extensive recordkeeping and reporting and must make available our facilities and records for periodic unannounced inspections by governmental agencies, including the FDA, state authorities, European Union Notified Bodies and comparable agencies in other countries. If we fail a regulatory inspection, our operations could be disrupted and our manufacturing interrupted. Failure to take adequate corrective action in response to an adverse regulatory inspection could result in, among other things, a shutdown of our manufacturing or product distribution operations, significant fines, suspension of marketing clearances and approvals, seizures or recalls of our device, operating restrictions and criminal prosecutions, any of which would negatively affect our business, financial condition and results of operations. Furthermore, our key component suppliers may not currently be or may not continue to be in compliance with applicable regulatory requirements, which may result in manufacturing delays for our product and cause our revenue to decline.

We are registered with the FDA as a manufacturer. The FDA has broad post-market and regulatory enforcement powers. We are subject to unannounced inspections by the FDA and the Food and Drug Branch of the California Department of Public Health (CDPH) to determine our compliance with the QSR and other regulations at our manufacturing facility, and these inspections may include the manufacturing facilities of our suppliers. Our design facilities in Redwood City, California were most recently audited by the FDA in November 2016 and no observations resulting in a warning letter were identified. We believe that we are in compliance, in all material respects, with the QSR.

We also maintain a certificate of registration for the design, manufacture, service, and distribution of our product from British Standards Institution (BSI) in the Netherlands, our European Notified Body. Most recently, the BSI completed an ISO 13485 surveillance audit of our design, manufacturing and service operations in May 2019 and we believe that we are in compliance, in all material respects, with the MDD.

We can provide no assurance that we will continue to remain in compliance with the QSR or MDD. If the FDA, CDPH or BSI inspect any of our facilities and discover compliance problems, we may have to cease manufacturing

and product distribution until we can take the appropriate remedial steps to correct the audit findings. Taking corrective action may be expensive, time consuming and a distraction for management and if we experience a delay at our manufacturing facility, we may be unable to produce our solutions, which will negatively affect our business, financial condition and results of operations.

The misuse or off-label use of our solution will harm our image in the marketplace, result in injuries that lead to product liability suits or result in costly investigations and sanctions by regulatory bodies if we are deemed to have engaged in the promotion of these uses, any of which will negatively affect our business, financial condition and results of operations.

Our solution has been approved by the FDA for specific indications. We train our marketing and direct sales force to not promote our products for uses outside of the FDA-approved indications for use, known as "off-label" uses. We cannot, however, prevent a physician from using our products off-label, when in the physician's independent professional medical judgment, he or she deems it appropriate. There may be increased risk of injury to patients if physicians attempt to use our products off-label. Furthermore, the use of our products for indications other than those approved by the FDA or any foreign regulatory body may not effectively treat such conditions, which will harm our reputation in the marketplace among physicians and patients.

Physicians may also misuse our products or use improper techniques if they are not adequately trained, potentially leading to injury and an increased risk of product liability. If our products are misused or used with improper technique, we may become subject to costly litigation by our customers or their patients. Product liability claims could divert management's attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. In addition, if the FDA or any foreign regulatory body determines that our promotional materials or training constitute promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance of an untitled letter, a warning letter, injunction, seizure, civil fine or criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider our business activities to constitute promotion of an off-label use, which could result in significant penalties, including, but not limited to, criminal, civil and administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs, and the curtailment of our operations. Any of these events will negatively affect our business, financial condition and results of operations and cause our stock price to decline.

We may be subject to regulatory or enforcement actions if we engage in improper marketing or promotion of our products.

Our educational and promotional activities and training methods must comply with FDA and other applicable laws, including the prohibition of the promotion of a medical device for a use that has not been cleared or approved by the FDA. Use of a device outside of its cleared or approved indications is known as "off-label" use. Physicians may use our products off-label in their professional medical judgment, as the FDA does not restrict or regulate a physician's choice of treatment within the practice of medicine. However, if the FDA determines that our educational and promotional activities or training constitutes promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance of warning letters, untitled letters, fines, penalties, injunctions, or seizures, which could have an adverse impact on our reputation and financial results. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider our educational and promotional activities or training methods to constitute promotion of an off-label use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement. In that event, our reputation could be damaged, and adoption of the products could be impaired. Although our policy is to refrain from statements that could be considered off-label promotion of our products, the FDA or another regulatory agency could disagree and conclude that we have engaged in off-label promotion. It is also possible that other federal, state or foreign enforcement authorities might take action, such as federal prosecution under the federal civil False Claims Act, if they consider our business activities constitute promotion of an off-label use, which could result in significant penalties, including, but not limited to, criminal, civil or administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs, additional reporting requirements and oversight if we become subject to a corporate integrity

agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations. In addition, the off-label use of our products may increase the risk of product liability claims. Product liability claims are expensive to defend and could divert our management's attention, result in substantial damage awards against us, and harm our reputation.

The clinical trial process required to obtain regulatory approvals is lengthy and expensive with uncertain outcomes. If clinical studies of our future products do not produce results necessary to support regulatory clearance or approval in the United States or, with respect to our current or future products, elsewhere, we will be unable to expand the indications for or commercialize these products and may incur additional costs or experience delays in completing, or ultimately be unable to complete, the commercialization of those products.

We have obtained PMA approval for the Zephyr Valve. In order to obtain PMA approval for a device, the sponsor must conduct well-controlled clinical trials designed to assess the safety and efficacy of the product candidate. Conducting clinical trials is a complex and expensive process, can take many years, and outcomes are inherently uncertain. We incur substantial expense for, and devote significant time to, clinical trials but cannot be certain that the trials will ever result in commercial revenue. We may experience significant setbacks in clinical trials, even after earlier clinical trials showed promising results, and failure can occur at any time during the clinical trial process. Any of our products may malfunction or may produce undesirable adverse effects that could cause us or regulatory authorities to interrupt, delay or halt clinical trials. We, the FDA, or another regulatory authority may suspend or terminate clinical trials at any time to avoid exposing trial participants to unacceptable health risks.

Successful results of pre-clinical studies are not necessarily indicative of future clinical trial results, and predecessor clinical trial results may not be replicated in subsequent clinical trials. Additionally, the FDA may disagree with our interpretation of the data from our pre-clinical studies and clinical trials, or may find the clinical trial design, conduct or results inadequate to prove safety or efficacy, and may require us to pursue additional pre-clinical studies or clinical trials, which could further delay the clearance or approval of our products. The data we collect from our pre-clinical studies and clinical trials may not be sufficient to support FDA clearance or approval, and if we are unable to demonstrate the safety and efficacy of our future products in our clinical trials, we will be unable to obtain regulatory clearance or approval to market our products.

In addition, we may estimate and publicly announce the anticipated timing of the accomplishment of various clinical, regulatory and other product development goals, which are often referred to as milestones. These milestones could include the obtainment of the right to affix the CE mark in the European Union; the submission to the FDA of an Investigational Device Exemption (IDE) application to commence a pivotal clinical trial for a new product candidate; the enrollment of patients in clinical trials; the release of data from clinical trials; and other clinical and regulatory events. The actual timing of these milestones could vary dramatically compared to our estimates, in some cases for reasons beyond our control. We cannot assure you that we will meet our projected milestones and if we do not meet these milestones as publicly announced, the commercialization of our products may be delayed and, as a result, our stock price may decline.

Clinical trials are necessary to support PMA applications and may be necessary to support PMA supplements for modified versions of our marketed device products. This would require the enrollment of large numbers of suitable subjects, which may be difficult to identify, recruit and maintain as participants in the clinical trial. Adverse outcomes in the post-approval studies could also result in restrictions or withdrawal of approval of the PMA. We will likely need to conduct additional clinical studies in the future to support new indications for our products or for approvals or clearances of new product lines, or for the approval of the use of our products in some foreign countries. Clinical testing is difficult to design and implement, can take many years, can be expensive and carries uncertain outcomes. The initiation and completion of any of these studies may be prevented, delayed, or halted for numerous reasons. We may experience a number of events that could adversely affect the costs, timing or successful completion of our clinical trials, including:

- we may be required to submit an IDE application to the FDA, which must become effective prior to commencing human clinical trials, and the FDA may reject our IDE application and notify us that we may not begin investigational trials;

- regulators and other comparable foreign regulatory authorities may disagree as to the design or implementation of our clinical trials;
- regulators, IRBs or other reviewing bodies may not authorize us or our investigators to commence a clinical trial, or to conduct or continue a clinical trial at a prospective or specific trial site;
- we may not reach agreement on acceptable terms with prospective contract research organizations (CROs) and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of subjects or patients required for clinical trials may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate, and the number of clinical trials being conducted at any given time may be high and result in fewer available patients for any given clinical trial, or patients may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors, including those manufacturing products or conducting clinical trials on our behalf, may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical trials for various reasons, including a finding that the subjects are being exposed to unacceptable health risks;
- we may have to amend clinical trial protocols or conduct additional studies to reflect changes in regulatory requirements or guidance, which we may be required to submit to an IRB or regulatory authority for re-examination;
- regulators, IRBs, or other parties may require or recommend that we or our investigators suspend or terminate clinical research for various reasons, including safety signals or noncompliance with regulatory requirements;
- the cost of clinical trials may be greater than we anticipate;
- clinical sites may not adhere to the clinical protocol or may drop out of a clinical trial;
- we may be unable to recruit a sufficient number of clinical trial sites;
- regulators, IRBs, or other reviewing bodies may fail to approve or subsequently find fault with our manufacturing processes or facilities of third-party supplier with which we enter into agreement for clinical and commercial supplies, the supply of devices or other materials necessary to conduct clinical trials may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply;
- approval policies or regulations of the FDA or applicable foreign regulatory agencies may change in a manner rendering our clinical data insufficient for approval; and
- our current or future products may have undesirable side effects or other unexpected characteristics.

Patient enrollment in clinical trials and completion of patient follow-up depend on many factors, including the size of the patient population, the nature of the trial protocol, the proximity of patients to clinical sites, the eligibility criteria for the clinical trial, patient compliance, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages of the product being studied in relation to other available therapies, including any new

treatments that may be approved for the indications we are investigating. For example, patients may be discouraged from enrolling in our clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and efficacy of a product candidate, or they may be persuaded to participate in contemporaneous clinical trials of a competitor's product candidate or provider's competing clinical trial. In addition, patients participating in our clinical trials may drop out before completion of the trial or experience adverse medical events unrelated to our products. Delays in patient enrollment or failure of patients to continue to participate in a clinical trial may delay commencement or completion of the clinical trial, cause an increase in the costs of the clinical trial and delays, or result in the failure of the clinical trial.

Our products may cause or contribute to adverse medical events or be subject to failures or malfunctions that we are required to report to the FDA, and if we fail to do so, we would be subject to sanctions that could negatively affect our business, financial condition and results of operations.

We are required to file various reports with the FDA and European regulators, including reports required by the MDRs that require that we report to the regulatory authorities if our solutions may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur and we have filed such reports in the past. The timing of our obligation to report is triggered by the date we become aware of the adverse event as well as the nature of the event. We may fail to report adverse events of which we become aware within the prescribed timeframe. We may also fail to recognize that we have become aware of a reportable adverse event, especially if it is not reported to us as an adverse event or if it is an adverse event that is unexpected or removed in time from the use of the product. If these reports are not filed in a timely manner, regulators may impose sanctions and we may be subject to product liability or regulatory enforcement actions, all of which will negatively affect our business, financial condition and results of operations.

If we initiate a correction or removal for the Zephyr Valve to reduce a risk to health posed by it, we would be required to submit a publicly available correction and removal report to the FDA and, in many cases, similar reports to other regulatory agencies. This report could be classified by the FDA as a device recall which could lead to increased scrutiny by the FDA, other international regulatory agencies and our customers regarding the quality and safety of our solutions. Furthermore, the submission of these reports could be used by competitors against us and cause physicians to delay or cancel prescriptions, which will harm our reputation.

If we assess a potential quality issue or complaint as not requiring either field action or notification, respectively, regulators may review documentation of that decision during a subsequent audit. If regulators disagree with our decision, or take issue with either our investigation process or the resulting documentation, regulatory agencies may impose sanctions and we may be subject to regulatory enforcement actions, including warning letters, all of which will negatively affect our business, financial condition and results of operations.

If we do not obtain and maintain international regulatory registrations or approvals for our products, we will be unable to market and sell our products outside of the United States.

Sales of our products outside of the United States are subject to foreign regulatory requirements that vary widely from country to country. In addition, the FDA regulates exports of medical devices from the United States. While the regulations of some countries may not impose barriers to marketing and selling our products or only require notification, others require that we obtain the approval of a specified regulatory body. Complying with foreign regulatory requirements, including obtaining registrations or approvals, can be expensive and time-consuming, and we may not receive regulatory approvals in each country in which we plan to market our products, or we may be unable to do so on a timely basis. The time required to obtain registrations or approvals, if required by other countries, may be longer than that required for FDA approval, and requirements for such registrations, clearances or approvals may significantly differ from FDA requirements. If we modify our products, we may need to apply for additional regulatory approvals before we are permitted to sell the modified product. In addition, we may not continue to meet the quality and safety standards required to maintain the authorizations that we have received. If we are unable to maintain our authorizations in a particular country, we will no longer be able to sell the applicable product in that country.

Regulatory approval by the FDA does not ensure registration, clearance or approval by regulatory authorities in other countries, and registration, clearance or approval by one or more foreign regulatory authorities does not ensure registration, clearance or approval by regulatory authorities in other foreign countries or by the FDA. However, a failure or delay in obtaining registration or regulatory clearance or approval in one country may have a negative effect on the regulatory process in others.

Healthcare reform measures could hinder or prevent the commercial success of our solutions.

In the United States, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system in ways that will harm our future revenues and profitability and the demand for our solutions. Federal and state lawmakers regularly propose and, at times, enact legislation that would result in significant changes to the healthcare system, some of which are intended to contain or reduce the costs of medical products and services. Current and future legislative proposals to further reform healthcare or reduce healthcare costs may limit coverage of or lower reimbursement for the procedures associated with the use of our products. The cost containment measures that payers and providers are instituting and the effect of any healthcare reform initiative implemented in the future could impact our revenue from the sale of our products. For example, the Affordable Care Act contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement changes and fraud and abuse measures, all of which will impact existing government healthcare programs and will result in the development of new programs. The Affordable Care Act, among other things, imposed an excise tax of 2.3% on the sale of most medical devices, including ours, and any failure to pay this amount could result in the imposition of an injunction on the sale of our products, fines and penalties. Although this tax has been suspended through 2019, it is expected to apply to sales of our products in 2020 and thereafter.

Some of the provisions of the Affordable Care Act have yet to be implemented, and there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the Affordable Care Act. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the Affordable Care Act. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the Affordable Care Act such as removing penalties, starting January 1, 2019, for not complying with the Affordable Care Act's individual mandate to carry health insurance and delaying the implementation of certain fees mandated by the Affordable Care Act. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the individual mandate was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017. While the Texas U.S. District Court Judge, as well as the Trump administration and CMS, have stated that the ruling will have no immediate effect pending appeal of the decision, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the Affordable Care Act will impact the Affordable Care Act and negatively affect our business, financial condition and results of operations.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. For example, the Budget Control Act of 2011, among other things, included reductions to CMS payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2029 unless additional Congressional action is taken. Additionally, the American Taxpayer Relief Act of 2012, among other things, reduced CMS payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

The current presidential administration and Congress may continue to pursue significant changes to the current healthcare laws. We face uncertainties that might result from modifications or repeal of any of the provisions of the Affordable Care Act, including as a result of current and future executive orders and legislative actions. The impact of those changes on us and potential effect on the medical device industry as a whole is currently unknown. Any changes to the Affordable Care Act are likely to have an impact on our results of operations, and may negatively affect our business, financial condition and results of operations. We cannot predict what other healthcare programs

and regulations will ultimately be implemented at the federal or state level or the effect of any future legislation or regulation in the United States may negatively affect our business, financial condition and results of operations.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare will harm:

- our ability to set a price that we believe is fair for the Zephyr Valve;
- our ability to generate revenue and achieve or maintain profitability; and
- the availability of capital.

Changes in healthcare policy could increase our costs and subject us to additional regulatory requirements that may interrupt commercialization of our current and future solutions. Changes in healthcare policy could increase our costs, decrease our revenue and impact sales of and reimbursement for our current and future products. The Affordable Care Act substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacts our industry.

Legal, political and economic uncertainty surrounding the exit of the United Kingdom from the European Union may be a source of instability in international markets, create significant currency fluctuations, adversely affect our operations in the United Kingdom and pose additional risks to our business, financial condition and results of operations.

Following the result of a referendum in 2016, the United Kingdom left the European Union on January 31, 2020, commonly referred to as Brexit. Pursuant to the formal withdrawal arrangements agreed between the United Kingdom and the European Union, the United Kingdom will be subject to a transition period until December 31, 2020 (Transition Period), during which European Union rules will continue to apply. Negotiations between the United Kingdom and the European Union are expected to continue in relation to the customs and trading relationship between the United Kingdom and the European Union following the expiry of the Transition Period.

Lack of clarity about future U.K. laws and regulations as the United Kingdom determines which European Union rules and regulations to replace or replicate, including financial laws and regulations, tax and free trade agreements, intellectual property rights, supply chain logistics, environmental, health and safety laws and regulations, immigration laws and employment laws, could decrease foreign direct investment in the United Kingdom, increase costs, depress economic activity and restrict access to capital. Possible changes to the rules and regulations relating to quality, safety and efficacy of products, clinical trials, marketing authorization, commercial sales and distribution of products could materially impact the regulatory regime with respect to products and approval of any product candidates in the United Kingdom or the European Union and we may be forced to restrict or delay efforts to sell our products or seek regulatory approval of product candidates in the United Kingdom and/or the European Union, which could negatively affect our business, financial condition and results of operations. The long-term effects of Brexit will depend on any agreements (or lack thereof) between the United Kingdom and the European Union and, in particular, any arrangements for the United Kingdom to retain access to European Union markets following the expiry of the Transition Period.

We are subject to governmental regulation and other legal obligations, particularly related to privacy, data protection and information security, and we are subject to consumer protection laws that regulate our marketing practices and prohibit unfair or deceptive acts or practices. Our actual or perceived failure to comply with such obligations could harm our business.

We are subject to diverse laws and regulations relating to data privacy and security, including, in the United States, HIPAA and, in the European Union and the EEA, GDPR. New privacy rules are being enacted in the United States and globally, and existing ones are being updated and strengthened. For example, on June 28, 2018, California enacted the California Consumer Privacy Act (CCPA), which takes effect on January 1, 2020. The CCPA creates

individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal information.

The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Complying with these numerous, complex and often changing regulations is expensive and difficult, and failure to comply with any privacy laws or data security laws or any security incident or breach involving the misappropriation, loss or other unauthorized use or disclosure of sensitive or confidential patient or consumer information, whether by us, one of our business associates or another third-party, could negatively affect our business, financial condition and results of operations, including but not limited to: investigation costs, material fines and penalties; compensatory, special, punitive and statutory damages; litigation; consent orders regarding our privacy and security practices; requirements that we provide notices, credit monitoring services or credit restoration services or other relevant services to impacted individuals; adverse actions against our licenses to do business; and injunctive relief.

The privacy laws in the European Union have been significantly reformed. On May 25, 2018, the GDPR entered into force and became directly applicable in all European Union member states. The GDPR implements more stringent operational requirements than its predecessor legislation. For example, the GDPR requires us to make more detailed disclosures to data subjects, requires disclosure of the legal basis on which we can process personal data, makes it harder for us to obtain valid consent for processing, require the appointment of data protection officers when sensitive personal data, such as health data, is processed on a large scale, provides more robust rights for data subjects, introduces mandatory data breach notification through the European Union, imposes additional obligations on us when contracting with service providers and requires us to adopt appropriate privacy governance including policies, procedures, training and data audit. If we do not comply with our obligations under the GDPR, we could be exposed to fines of up to the greater of €20 million or up to 4% of our total global annual revenue in the event of a significant breach. In addition, we may be the subject of litigation or adverse publicity, which could negatively affect our business, financial condition and results of operations.

We cannot assure you that our third-party service providers with access to our or our customers', suppliers', trial patients' and employees' personally identifiable and other sensitive or confidential information in relation to which we are responsible will not breach contractual obligations imposed by us, or that they will not experience data security breaches or attempts thereof, which could have a corresponding effect on our business, including putting us in breach of our obligations under privacy laws and regulations, which could in turn adversely affect our business, results of operations and financial condition. We cannot assure you that our contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, storage and transmission of such information. Increasing use of social media could also give rise to liability, breaches of data security or reputational damage.

We face potential liability related to the privacy of health information we obtain.

Most healthcare providers, including hospitals from which we obtain patient health information, are subject to privacy and security regulations promulgated under HIPAA, as amended by the HITECH. We are not currently classified as a covered entity or business associate under HIPAA and thus are not subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, we may maintain sensitive personally identifiable information, including health information, that we receive throughout the clinical trial process, in the course of our research collaborations, and directly from individuals (or their healthcare providers) who enroll in our patient reimbursement support programs. As such, we may be subject to state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA. Our clinical trial programs outside the United States may implicate international data protection laws, including the European Union Data Protection Directive and legislation of the European Union member states implementing it.

Our activities outside the United States impose additional compliance requirements and generate additional risks of enforcement for noncompliance. Failure by third-party contractors to comply with the strict rules on the transfer of personal data outside of the European Union into the United States may result in the imposition of criminal and administrative sanctions on such collaborators, which could adversely affect our business. Furthermore, certain health privacy laws, data breach notification laws, consumer protection laws and genetic testing laws may apply directly to our operations or those of our collaborators and may impose restrictions on our collection, use and dissemination of individuals' health information.

Moreover, patients about whom we or our collaborators obtain health information, as well as the providers who share this information with us, may have statutory or contractual rights that limit our ability to use and disclose the information. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could negatively affect our business, financial condition and results of operations. If we or third-party contractors or consultants fail to comply with applicable federal, state or local regulatory requirements, we could be subject to a range of regulatory actions that could affect our or our contractors' ability to develop and commercialize our product candidates and could harm or prevent sales of any affected products that we are able to commercialize, or could substantially increase the costs and expenses of developing, commercializing and marketing our products. Any threatened or actual government enforcement action could also generate adverse publicity and require that we devote substantial resources that could otherwise be used in other aspects of our business.

Our employees, consultants, and other commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements.

We are exposed to the risk that our employees, consultants, and other commercial partners and business associates may engage in fraudulent or illegal activity. Misconduct by these parties could include intentional, reckless or negligent conduct or other unauthorized activities that violate the regulations of the FDA and non-U.S. regulators, including those laws requiring the reporting of true, complete and accurate information to such regulators, manufacturing standards, healthcare fraud and abuse laws and regulations in the United States and internationally or laws that require the true, complete and accurate reporting of financial information or data. In particular, sales, marketing and business arrangements in the healthcare industry, including the sale of medical devices, are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. It is not always possible to identify and deter misconduct by our employees, consultants and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could result in the imposition of significant fines or other sanctions, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of operations, any of which could adversely affect our ability to operate our business and our results of operations. Whether or not we are successful in defending against such actions or investigations, we could incur substantial costs, including legal fees and reputational harm, and divert the attention of management in defending ourselves against any of these claims or investigations.

Compliance with environmental laws and regulations could be expensive, and the failure to comply with these laws and regulations could subject us to significant liability.

Our research, development and manufacturing operations involve the use of hazardous substances, and we are subject to a variety of federal, state, local and foreign environmental laws and regulations relating to the storage, use, handling, generation, manufacture, treatment, discharge and disposal of hazardous substances. Our products may also contain hazardous substances, and they are subject laws and regulations relating to labeling requirements

and to their sale, collection, recycling, treatment, storage and disposal. Compliance with these laws and regulations may be expensive and noncompliance could result in substantial fines and penalties. Environmental laws and regulations also impose liability for the remediation of releases of hazardous substances into the environment and for personal injuries resulting from exposure to hazardous substances, and they can give rise to substantial remediation costs and to third-party claims, including for property damage and personal injury. Liability under environmental laws and regulations can be joint and several and without regard to fault or negligence, and they tend to become more stringent over time, imposing greater compliance costs and increased risks and penalties associated with violations. We cannot assure you that violations of these laws and regulations, or releases of or exposure to hazardous substances, will not occur in the future or have not occurred in the past, including as a result of human error, accidents, equipment failure or other causes. The costs of complying with environmental laws and regulations, and liabilities that may be imposed for violating them, or for remediation obligations or responding to third-party claims, could negatively affect our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

We may become a party to intellectual property litigation or administrative proceedings that could be costly and could interfere with our ability to sell and market our products.

The medical device industry has been characterized by extensive litigation regarding patents, trademarks, trade secrets, and other intellectual property rights, and companies in the industry have used intellectual property litigation to gain a competitive advantage. It is possible that U.S. and foreign patents and pending patent applications or trademarks controlled by third parties may be alleged to cover our products, or that we may be accused of misappropriating third parties' trade secrets. Additionally, our products include components that we purchase from vendors, and may include design components that are outside of our direct control. Our competitors, many of which have substantially greater resources and have made substantial investments in patent portfolios, trade secrets, trademarks, and competing technologies, may have applied for or obtained, or may in the future apply for or obtain, patents or trademarks that will prevent, limit or otherwise interfere with our ability to make, use, sell or export our products or to use our technologies or product names. Moreover, in recent years, individuals and groups that are non-practicing entities, commonly referred to as patent trolls, have purchased patents and other intellectual property assets for the purpose of making claims of infringement in order to extract settlements. From time to time, we may receive threatening letters, notices or invitations to license, or may be the subject of claims that our products and business operations infringe or violate the intellectual property rights of others. The defense of these matters can be time consuming, costly to defend in litigation, divert management's attention and resources, damage our reputation and brand and cause us to incur significant expenses or make substantial payments. Vendors from whom we purchase hardware or software may not indemnify us in the event that such hardware or software is accused of infringing a third-party's patent or trademark or of misappropriating a third-party's trade secret.

Since patent applications are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our products. Competitors may also contest our patents, if issued, by showing the patent examiner that the invention was not original, was not novel or was obvious. In litigation, a competitor could claim that our patents, if issued, are not valid for a number of reasons. If a court agrees, we would lose our rights to those challenged patents. Because we have not conducted a formal freedom to operate analysis for patents related to our products, we may not be aware of issued patents that a third party might assert are infringed by one of our current products or future product candidates, which could materially impair our ability to commercialize our products or product candidates. Even if we diligently search third-party patents for potential infringement by our products or product candidates, we may not successfully find patents that our products or product candidates may infringe. If we are unable to secure and maintain freedom to operate, others could preclude us from commercializing our products or product candidates.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents, patent applications or other intellectual property, as a result of the work they performed on our behalf. Although we generally require all of our employees and consultants and any other partners or collaborators who have access to our proprietary know-how, information or technology to assign or grant similar rights to their inventions to us, we cannot be certain that we have executed such agreements with all parties who

may have contributed to our intellectual property, nor can we be certain that our agreements with such parties will be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy.

Any lawsuits relating to intellectual property rights could subject us to significant liability for damages and invalidate our proprietary rights. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop making, selling or using products or technologies that allegedly infringe the asserted intellectual property;
- lose the opportunity to license our intellectual property to others or to collect royalty payments based upon successful protection and assertion of our intellectual property rights against others; incur significant legal expenses;
- pay substantial damages or royalties to the party whose intellectual property rights we may be found to be infringing;
- pay the attorney's fees and costs of litigation to the party whose intellectual property rights we may be found to be infringing;
- redesign those products or technologies that contain the allegedly infringing intellectual property, which could be costly, disruptive and infeasible; and
- attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all, or from third parties who may attempt to license rights that they do not have.

In addition, if we are found to willfully infringe third-party patents or trademarks or to have misappropriated trade secrets, we could be required to pay treble damages in addition to other penalties. Although patent, trademark, trade secret, and other intellectual property disputes in the medical device area have often been settled through licensing or similar arrangements, costs associated with such arrangements may be substantial and could include ongoing royalties. We may be unable to obtain necessary licenses on satisfactory terms, if at all. If we do not obtain necessary licenses, we may not be able to redesign our products to avoid infringement.

Any litigation or claim against us, even those without merit and even those where we prevail, may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation. If we are found to infringe the intellectual property rights of third parties, we could be required to pay substantial damages (which may be increased up to three times of awarded damages) or substantial royalties and could be prevented from selling our products unless we obtain a license or are able to redesign our products to avoid infringement. Any such license may not be available on reasonable terms, if at all, and there can be no assurance that we would be able to redesign our products in a way that would not infringe the intellectual property rights of others. We could encounter delays in product introductions while we attempt to develop alternative methods or products. If we fail to obtain any required licenses or make any necessary changes to our products or technologies, we may have to withdraw existing products from the market or may be unable to commercialize one or more of our products.

In addition, we generally indemnify our customers with respect to infringement by our products of the proprietary rights of third parties. Third parties may assert infringement claims against our customers. These claims may require us to initiate or defend protracted and costly litigation on behalf of our customers, regardless of the merits of these claims. If any of these claims succeed or settle, we may be forced to pay damages or settlement payments on behalf of our customers or may be required to obtain licenses for the products they use. If we cannot obtain all necessary licenses on commercially reasonable terms, our customers may be forced to stop using our products.

Similarly, interference or derivation proceedings provoked by third parties or brought by the U.S. Patent and Trademark Office (USPTO) may be necessary to determine priority with respect to our patents, patent applications, trademarks or trademark applications. We may also become involved in other proceedings, such as reexamination, inter parties review, derivation or opposition proceedings before the USPTO or other jurisdictional body relating to our intellectual property rights or the intellectual property rights of others. Adverse determinations in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing our products or using product names, which would have a significant adverse impact on our business, financial condition and results of operations.

Additionally, we may file lawsuits or initiate other proceedings to protect or enforce our patents or other intellectual property rights, which could be expensive, time consuming and unsuccessful. Competitors may infringe our issued patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property. In addition, in a patent or other intellectual property infringement proceeding, a court may decide that a patent or other intellectual property of ours is invalid or unenforceable, in whole or in part, construe the patent's claims or other intellectual property narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents or other intellectual property do not cover the technology in question. Furthermore, even if our patents or other intellectual property are found to be valid and infringed, a court may refuse to grant injunctive relief against the infringer and instead grant us monetary damages or ongoing royalties. Such monetary compensation may be insufficient to adequately offset the damage to our business caused by the infringer's competition in the market. An adverse result in any litigation proceeding could put one or more of our patents or other intellectual property at risk of being invalidated or interpreted narrowly, which could adversely affect our competitive business position, financial condition and results of operations.

Our success will depend on our, and any of our current and future licensors', ability to obtain, maintain and protect our intellectual property rights.

In order to remain competitive, we must develop, maintain and protect the proprietary aspects of our brands, technologies and data. We rely on a combination of contractual provisions, confidentiality procedures and patent, copyright, trademark, trade secret and other intellectual property laws to protect the proprietary aspects of our brands, technologies and data. These legal measures afford only limited protection, and competitors or others may gain access to or use our intellectual property and proprietary information. Our success will depend, in part, on preserving our trade secrets, maintaining the security of our data and know-how and obtaining and maintaining other intellectual property rights by us and our current and future licensors. We, and our current and future licensors, may not be able to obtain or maintain intellectual property or other proprietary rights necessary to our business or in a form that provides us with a competitive advantage.

In addition, our trade secrets, data and know-how could be subject to unauthorized use, misappropriation, or disclosure to unauthorized parties, despite our efforts to enter into confidentiality agreements with our employees, consultants, clients and other vendors who have access to such information, and could otherwise become known or be independently discovered by third parties. Our intellectual property, including trademarks, could be challenged, invalidated, infringed, and circumvented by third parties, and our trademarks could also be diluted, declared generic or found to be infringing on other marks. If any of the foregoing occurs, we could be forced to re-brand our products, resulting in loss of brand recognition and requiring us to devote resources to advertising and marketing new brands, and suffer other competitive harm. Third parties may also adopt trademarks similar to ours, which could harm our brand identity and lead to market confusion. Failure to obtain and maintain intellectual property rights necessary to our business and failure to protect, monitor and control the use of our intellectual property rights could negatively impact our ability to compete and cause us to incur significant expenses. The intellectual property laws and other statutory and contractual arrangements in the United States and other jurisdictions we depend upon may not provide sufficient protection in the future to prevent the infringement, use, violation or misappropriation of our trademarks, data, technology and other intellectual property and services, and may not provide an adequate remedy if our intellectual property rights are infringed, misappropriated or otherwise violated.

We rely, in part, on our ability to obtain, maintain, expand, enforce, and defend the scope of our intellectual property portfolio or other proprietary rights, including the amount and timing of any payments we may be required to make in connection with the licensing, filing, defense and enforcement of any patents or other intellectual property rights. The process of applying for and obtaining a patent is expensive, time consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost, in a timely manner, or in all jurisdictions where protection may be commercially advantageous, or we may not be able to protect our proprietary rights at all. Despite our efforts to protect our proprietary rights, unauthorized parties may be able to obtain and use information that we regard as proprietary. In addition, the issuance of a patent does not ensure that it is valid or enforceable, so even if we obtain patents, they may not be valid or enforceable against third parties. Our patent applications may not result in issued patents and our patents may not be sufficiently broad to protect our technology.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- any of our patents, or any of our pending patent applications, if issued, will include claims having a scope sufficient to protect our products;
- any of our pending patent applications will issue as patents;
- we will be able to successfully commercialize our products on a substantial scale, if approved, before our relevant patents we may have expire;
- we were the first to make the inventions covered by each of our patents and pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not develop similar or alternative technologies that do not infringe our patents; any of our patents will be found to ultimately be valid and enforceable;
- any patents issued to us will provide a basis for an exclusive market for our commercially viable products, will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies or products that are separately patentable; or
- our commercial activities or products will not infringe upon the patents of others.

Moreover, even if we are able to obtain patent protection, such patent protection may be of insufficient scope to achieve our business objectives. Issued patents may be challenged, narrowed, invalidated or circumvented. Decisions by courts and governmental patent agencies may introduce uncertainty in the enforceability or scope of patents owned by or licensed to us. Furthermore, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our own products and practicing our own technology. Alternatively, third parties may seek approval to market their own products similar to or otherwise competitive with our products. In these circumstances, we may need to defend or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency with jurisdiction may find our patents invalid, unenforceable or not infringed; competitors may then be able to market products and use manufacturing and analytical processes that are substantially similar to ours. Even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

If we are unable to protect the confidentiality of our other proprietary information, our business and competitive position may be harmed.

In addition to patent protection, we also rely on other proprietary rights, including protection of trade secrets, and other proprietary information that is not patentable or that we elect not to patent. However, trade secrets can be

difficult to protect, and some courts are less willing or unwilling to protect trade secrets. To maintain the confidentiality of our trade secrets and proprietary information, we rely heavily on confidentiality provisions that we have in contracts with our employees, consultants, collaborators and others upon the commencement of their relationship with us. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes. We may not be able to prevent the unauthorized disclosure or use of our technical knowledge or other trade secrets by such third parties, despite the existence generally of these confidentiality restrictions. These contracts may not provide meaningful protection for our trade secrets, know-how, or other proprietary information in the event of any unauthorized use, misappropriation, or disclosure of such trade secrets, know-how, or other proprietary information. There can be no assurance that such third parties will not breach their agreements with us, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or independently developed by competitors. Despite the protections we do place on our intellectual property or other proprietary rights, monitoring unauthorized use and disclosure of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property or other proprietary rights will be adequate. In addition, the laws of many foreign countries will not protect our intellectual property or other proprietary rights to the same extent as the laws of the United States. Consequently, we may be unable to prevent our proprietary technology from being exploited abroad, which could affect our ability to expand to international markets or require costly efforts to protect our technology.

We also license rights to use certain proprietary information and technology from third parties. The use of such proprietary information and technology is therefore subject to the obligations of the applicable license agreement between us and the owner. For example, the software we developed for the Chartis System includes the use of open source software that is subject to the terms and conditions of the applicable open source software licenses that grant us permission to use such software. The owner of any such proprietary information or technology also might not enforce or otherwise protect its rights in the proprietary information or technology with the same vigilance that we would, which would allow competitors to use such proprietary information and technology without having to adhere to a license agreement with the owner.

To the extent our intellectual property or other proprietary information protection is incomplete, we are exposed to a greater risk of direct competition. A third party could, without authorization, copy or otherwise obtain and use our products or technology, or develop similar technology. Our competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts or design around our protected technology. Our failure to secure, protect and enforce our intellectual property rights could substantially harm the value of our products, brand and business. The theft or unauthorized use or publication of our trade secrets and other confidential business information could reduce the differentiation of our products and harm our business, the value of our investment in development or business acquisitions could be reduced and third parties might make claims against us related to losses of their confidential or proprietary information. Any of the foregoing could materially and adversely affect our business, financial condition and results of operations.

Further, it is possible that others will independently develop the same or similar technology or product or otherwise obtain access to our unpatented technology, and in such cases, we could not assert any trade secret rights against such parties. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our trade secret rights and related confidentiality and nondisclosure provisions. If we fail to obtain or maintain trade secret protection, or if our competitors obtain our trade secrets or independently develop technology or products similar to ours or competing technologies or products, our competitive market position could be materially and adversely affected. In addition, some courts are less willing or unwilling to protect trade secrets and agreement terms that address non-competition are difficult to enforce in many jurisdictions and might not be enforceable in certain cases.

We also seek to preserve the integrity and confidentiality of our data and other confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and detecting the disclosure or misappropriation of confidential information and enforcing a claim that a party illegally disclosed or misappropriated confidential information is difficult, expensive

and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees on issued patents often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent. While an unintentional lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our products, we may not be able to stop a competitor from marketing products that are the same as or similar to our products, which would have a material adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

A company may attempt to commercialize competing products utilizing our proprietary design, trademarks or tradenames in foreign countries where we do not have any patents or patent applications and where legal recourse may be limited. This may have a significant commercial impact on our foreign business operations.

Filing, prosecuting and defending patents or trademarks on our current and future products in all countries throughout the world would be prohibitively expensive. The requirements for patentability and trademarking may differ in certain countries, particularly developing countries. The laws of some foreign countries do not protect intellectual property rights to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from utilizing our inventions and trademarks in all countries outside the United States. Competitors may use our technologies or trademarks in jurisdictions where we have not obtained patent or trademark protection to develop or market their own products and further, may export otherwise infringing products to territories where we have patent and trademark protection, but enforcement on infringing activities is inadequate. These products or trademarks may compete with our products or trademarks, and our patents, trademarks or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trademarks and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents and trademarks or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent and trademarks rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents and trademarks at risk of being invalidated or interpreted narrowly and our patent or trademark applications at risk, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, certain countries in Europe and certain developing countries, including India and China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we may have limited remedies if our patents are infringed or if we are compelled to grant a license to our patents to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license. Finally, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws.

We may be subject to claims that we or our employees have misappropriated the intellectual property of a third party, including trade secrets or know-how, or are in breach of non-competition or non-solicitation agreements with our competitors and third parties may claim an ownership interest in intellectual property we regard as our own.

Many of our employees and consultants were previously employed at or engaged by other medical device, biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, consultants and contractors, may have executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may be subject to claims that we or these individuals have, inadvertently or otherwise, misappropriated the intellectual property or disclosed the alleged trade secrets or other proprietary information, of these former employers or competitors.

Additionally, we may be subject to claims from third parties challenging our ownership interest in intellectual property we regard as our own, based on claims that our employees or consultants have breached an obligation to assign inventions to another employer, to a former employer, or to another person or entity. Litigation may be necessary to defend against any other claims, and it may be necessary or we may desire to enter into a license to settle any such claim; however, there can be no assurance that we would be able to obtain a license on commercially reasonable terms, if at all. If our defense to those claims fails, in addition to paying monetary damages, a court could prohibit us from using technologies or features that are essential to our products, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. An inability to incorporate technologies or features that are important or essential to our products could have a material adverse effect on our business, financial condition and results of operations, and may prevent us from selling our products. In addition, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against these claims, litigation could result in substantial costs and could be a distraction to management. Any litigation or the threat thereof may adversely affect our ability to hire employees or contract with independent sales personnel. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our products, which could have an adverse effect on our business, financial condition and results of operations.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our existing and future products.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. In 2011, the Leahy-Smith America Invents Act (Leahy-Smith Act) was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and also may affect patent litigation. These also include provisions that switched the United States from a first-to-invent system to a first-to-file system, allow third-party submission of prior art to the USPTO during patent prosecution and set forth additional procedures to attack the validity of a patent by the USPTO administered post grant proceedings. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective in 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. The Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition and results of operations.

In addition, patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement and defense of our patents and applications. Furthermore, the U.S. Supreme Court and the U.S. Court of Appeals for the Federal Circuit have made, and will likely continue to make,

changes in how the patent laws of the United States are interpreted. Similarly, foreign courts have made, and will likely continue to make, changes in how the patent laws in their respective jurisdictions are interpreted. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by U.S. and foreign legislative bodies. Those changes may materially affect our patents or patent applications and our ability to obtain additional patent protection in the future.

The failure of third parties to meet their contractual, regulatory and other obligations could adversely affect our business.

We rely on suppliers, vendors, outsourcing partners, consultants, alliance partners and other third parties to research, develop, manufacture and commercialize our products and manage certain parts of our business. Using these third parties poses a number of risks, such as: (i) they may not perform to our standards or legal requirements; (ii) they may not produce reliable results; (iii) they may not perform in a timely manner; (iv) they may not maintain confidentiality of our proprietary information; (v) disputes may arise with respect to ownership of rights to technology developed with our partners; and (vi) disagreements could cause delays in, or termination of, the research, development or commercialization of our products or result in litigation or arbitration. Moreover, some third parties are located in markets subject to political and social risk, corruption, infrastructure problems and natural disasters, in addition to country-specific privacy and data security risk given current legal and regulatory environments. Failure of third parties to meet their contractual, regulatory and other obligations may materially affect our business.

If our trademarks and tradenames are not adequately protected, then we may not be able to build name recognition in our markets and our business may be adversely affected.

We rely on trademarks, service marks, tradenames and brand names to distinguish our products from the products of our competitors and have registered or applied to register these trademarks. We have not yet registered certain of our trademarks, including “CHARITE” in Germany, and as a result we sell certain products using names that may not be protected or may be subject to third party challenges for infringement of such third party’s trademarks. We cannot assure you that our trademark applications will be approved. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in proceedings before the USPTO and comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources towards advertising and marketing new brands. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. Certain of our current or future trademarks may become so well known by the public that their use becomes generic and they lose trademark protection. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business, financial condition and results of operations may be adversely affected.

Patent terms may not be able to protect our competitive position for an adequate period of time with respect to our current or future technologies.

Patents have a limited lifespan. In the United States, the standard patent term is typically 20 years after filing. Various extensions may be available. Even so, the life of a patent and the protection it affords are limited. As a result, our patent portfolio provides us with limited rights that may not last for a sufficient period of time to exclude others from commercializing products similar or identical to ours. For example, given the large amount of time required for the research, development, testing and regulatory review of implantable medical devices, patents protecting our products might expire before or shortly after they are commercialized.

Extensions of patent term may be available, but there is no guarantee that we would succeed in obtaining any particular extension-and no guarantee any such extension would confer patent term for a sufficient period of time to

exclude others from commercializing products similar or identical to ours. In the United States, 35 U.S. Code § 156 Extension of patent term, permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). A patent term extension cannot extend the remaining term of a patent beyond 14 years from the date of product approval; only one patent may be extended; and extension is available for only those claims covering the approved device, a method for using it, or a method for manufacturing it. We have applied for such an extension however, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to any patents we obtain, or may grant more limited extensions than we request. An extension may not be granted or may be limited where there is, for example, a failure to exercise due diligence during the testing phase or regulatory review process, failure to apply within applicable deadlines, failure to apply before expiration of relevant patents, or some other failure to satisfy applicable requirements. If this occurs, our competitors may be able to launch their products earlier by taking advantage of our investment in development and clinical trials along with our clinical and pre-clinical data. This could have a material adverse effect on our business and ability to achieve profitability.

Risks Related to This Offering and Ownership of Our Common Stock

Our stock price may be volatile and the value of our common stock may decline.

The market price of our common stock may be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, some of which are beyond our control or are related in complex ways, including:

- actual or anticipated fluctuations in our financial condition and results of operations;
- variance in our financial performance from expectations of securities analysts or investors;
- changes in the pricing we offer our customers;
- changes in our projected operating and financial results;
- changes in laws or regulations applicable to our solution;
- announcements by us or our competitors of significant business developments, acquisitions, or new offerings;
- publicity associated with issues related to our solution;
- our involvement in litigation;
- future sales of our common stock or other securities, by us or our stockholders, as well as the anticipation of lock-up releases;
- changes in senior management or key personnel;
- the trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market;
- general economic, regulatory, and market conditions, including economic recessions or slowdowns;
- changes in the structure of healthcare payment systems; and
- developments or disputes concerning our intellectual property or other proprietary rights.

Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, may negatively impact the market price of our common stock. In addition, given the relatively small expected public float of shares of our common stock on the Nasdaq Global Market, the trading market for our shares may be subject to increased volatility. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

There has been no prior market for our common stock. An active market may not develop or be sustainable and investors may not be able to resell their shares at or above the initial public offering price.

There has been no public market for our common stock prior to this offering. The initial public offering price for our common stock will be determined through negotiations between the underwriters and us and may vary from the market price of our common stock following this offering. If you purchase shares of our common stock in this offering, you may not be able to resell those shares at or above the initial public offering price, if at all. An active or liquid market in our common stock may not develop after this offering or, if it does develop, it may not be sustainable.

You will experience immediate and substantial dilution in the net tangible book value of the shares of common stock you purchase in this offering.

The initial public offering price of our common stock will be substantially higher than the pro forma net tangible book value per share of our common stock immediately after this offering. If you purchase shares of our common stock in this offering, you will suffer immediate dilution of $ per share, or $ per share if the underwriters exercise their option to purchase additional shares in full, representing the difference between our pro forma as adjusted net tangible book value per share after giving effect to the sale of common stock in this offering and the initial public offering price of $ per share. See "Dilution." If outstanding options or warrants are exercised in the future, you will experience additional dilution.

Future sales and issuances of our capital stock or rights to purchase capital stock could result in additional dilution of the percentage ownership of our stockholders and could cause the price of our common stock to decline.

We may issue additional securities following the closing of this offering. Future sales and issuances of our capital stock or rights to purchase our capital stock could result in substantial dilution to our existing stockholders. We may sell common stock, convertible securities, and other equity securities in one or more transactions at prices and in a manner as we may determine from time to time. If we sell any such securities in subsequent transactions, investors may be materially diluted. New investors in such subsequent transactions could gain rights, preferences, and privileges senior to those of holders of our common stock.

We will have broad discretion in the use of proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return.

We will have broad discretion over the use of proceeds from this offering. Investors may not agree with our decisions, and our use of the proceeds may not yield any return on your investment. We currently intend to use the net proceeds from this offering for working capital and other general corporate purposes. Our failure to apply the net proceeds of this offering effectively could impair our ability to pursue our growth strategy or could require us to raise additional capital. In addition, pending their use, the proceeds of this offering may be placed in investments that do not produce income or that may lose value.

Additional sales of our common stock by existing stockholders in the public market could cause the market price of our common stock to decline.

Sales of a substantial number of shares of our common stock by existing stockholders in the public market following the closing of this offering, or the perception that these sales might occur, could depress the market price of our

common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our common stock.

Based on shares outstanding as of December 31, 2019, upon the closing of this offering, we will have outstanding a total of shares of common stock, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options or warrants, and after giving effect to the conversion of all outstanding shares of our preferred stock into 177,971,620 shares of common stock immediately prior to the closing of this offering, including 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019. All of our executive officers and directors and substantially all of our other existing security holders are subject to lock-up agreements that restrict their ability to transfer shares of our common stock, stock options, and other securities convertible into, exchangeable for, or exercisable for our common stock during the period ending on, and including, the 180th day after the date of this prospectus, subject to certain limited exceptions. BofA Securities, Inc. and Morgan Stanley & Co. LLC may, in their discretion, with or without notice, permit our stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, all 198,974,494 shares of common stock outstanding as of December 31, 2019 will become eligible for sale, of which 62,266,831 shares held by directors, executive officers, and other affiliates will be subject to volume limitations under Rule 144 under the Securities Act of 1933, as amended (Securities Act), and various vesting agreements.

In addition, as of December 31, 2019, there were 32,793,421 shares of common stock subject to outstanding options. We intend to register all of the shares of common stock issuable upon conversion of the shares of common stock issuable upon exercise of outstanding options, and upon exercise of settlement of any options or other equity incentives we may grant in the future, for public resale under the Securities Act. Accordingly, these shares will be able to be freely sold in the public market upon issuance as permitted by any applicable vesting requirements, subject to the lock-up agreements described above. The shares of common stock issuable upon conversion of these shares will become eligible for sale in the public market to the extent such options or warrants are exercised, subject to the lock-up agreements described above and compliance with applicable securities laws.

Holders of 186,305,482 shares of our common stock, including shares issuable upon the conversion of outstanding shares of preferred stock and shares of preferred stock issued upon the exercise in January and February 2020 of outstanding warrants, have rights, subject to some conditions, to require us to file registration statements for the public resale of the common stock issuable upon conversion of such shares or to include such shares in registration statements that we may file on our behalf or for other stockholders. See "Shares Eligible for Future Sale" and "Underwriting."

Concentration of ownership of our common stock among our executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Based on our common stock outstanding as of December 31, 2019 and including the shares to be sold in this offering, upon the closing of this offering, our executive officers, directors and current beneficial owners of 5% or more of our common stock will, in the aggregate, beneficially own approximately % of our outstanding common stock (assuming no exercise of the underwriters' option to purchase additional shares of common stock). These stockholders, acting together, will be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and any merger or other significant corporate transactions. The interests of this group of stockholders may not coincide with the interests of other stockholders.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors, or they may want us to pursue strategies that deviate from the interests of other stockholders.

If securities or industry analysts do not publish research or publish unfavorable or inaccurate research about our business, our common stock price and trading volume could decline.

Our stock price and trading volume will be heavily influenced by the way analysts and investors interpret our financial information and other disclosures. If securities or industry analysts do not publish research or reports about our business, delay publishing reports about our business, or publish negative reports about our business, regardless of accuracy, our common stock price and trading volume could decline.

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. We expect that only a limited number of analysts will cover our company following our initial public offering. If the number of analysts that cover us declines, demand for our common stock could decrease and our common stock price and trading volume may decline.

Even if our common stock is actively covered by analysts, we do not have any control over the analysts or the measures that analysts or investors may rely upon to forecast our future results. Over-reliance by analysts or investors on any particular metric to forecast our future results may result in forecasts that differ significantly from our own.

Regardless of accuracy, unfavorable interpretations of our financial information and other public disclosures could have a negative impact on our stock price. If our financial performance fails to meet analyst estimates, for any of the reasons discussed above or otherwise, or one or more of the analysts who cover us downgrade our common stock or change their opinion of our common stock, our stock price would likely decline.

We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our capital stock, and we do not intend to pay any cash dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors and may be restricted by the terms of any then-current credit facility. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

We are an "emerging growth company" and a "smaller reporting company" and our compliance with the reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we expect to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act (Section 404) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict whether investors will find our common stock less attractive as a result of our reliance on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We have not elected to use the extended transition period under the JOBS Act which would have allowed us to delay implementing new accounting standards, and, therefore, we will be subject to the same accounting standards as other public companies that are not "emerging growth companies."

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an "emerging growth company." We may take advantage of certain of reduced disclosures available to smaller reporting companies and will be able to take advantage of these reduced disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million

during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to compliance with our public company responsibilities and corporate governance practices.

As a public company, we will incur significant legal, accounting, and other expenses that we did not incur as a private company. We expect such expenses to further increase after we are no longer an "emerging growth company." The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Global Market, and other applicable securities rules and regulations impose various requirements on public companies. Furthermore, the senior members of our management team do not have significant experience with operating a public company. As a result, our management and other personnel will have to devote a substantial amount of time to compliance with these requirements. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. We cannot predict or estimate the amount of additional costs we will incur as a public company or the timing of such costs.

As a result of being a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We will be required, pursuant to Section 404 to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting in our first annual report required to be filed with the SEC following the date we are no longer an "emerging growth company." We have not yet commenced the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation required under Section 404, and we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion once initiated. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404.

During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to certify that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline and we could be subject to sanctions or investigations by the exchange on which our shares of common stock are listed, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Anti-takeover provisions in our charter documents to be in effect upon the closing of this offering and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws to be in effect upon the closing of this offering may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws will include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairperson of our board of directors, or our chief executive officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into a number of classes, with each class serving staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed for cause only upon the vote of the holders of a majority of our outstanding shares of common stock;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum; and
- require the approval of our board of directors or the holders of at least a majority of our outstanding shares of common stock to amend our bylaws and certain provisions of our certificate of incorporation.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally, subject to certain exceptions, prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause the market price of our common stock to decline.

Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction, any state court located within the State of Delaware or, if all such state courts lack

subject matter jurisdiction, the federal district court for the District of Delaware) is the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising under the Delaware General Corporation Law;
- our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any claim for which the federal district courts of the United States have exclusive jurisdiction. In addition, our amended and restated certificate of incorporation to be in effect upon the closing of this offering will further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. Our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of, and consented to, the provisions of our amended and restated certificate of incorporation described in the preceding sentences. These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable, we may incur additional costs associated with resolving the dispute in other jurisdictions. For example, the Court of Chancery of the State of Delaware recently determined that the exclusive forum provision of federal district courts of the United States for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, this decision may be reviewed and ultimately overturned by the Delaware Supreme Court. If this ultimate adjudication were to occur, the federal district court exclusive forum provision in our amended and restated certificate of incorporation would no longer be contingent.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial condition, business strategy, plans, and objectives of management for future operations and statements that are necessarily dependent upon future events are forward-looking statements. In some cases, you can identify forward-looking statements by words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “design,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “target,” “should,” “will,” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, and financial needs. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of known and unknown risks, uncertainties, and assumptions, including risks described in the section titled “Risk Factors.” These risks are not exhaustive. Other sections of this prospectus include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ from those contained in, or implied by, any forward-looking statements.

You should not rely on these forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus or to conform these statements to actual results or to changes in our expectations, whether as a result of any new information, future events, changed circumstances or otherwise. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- our ability to design, develop, manufacture and market innovative products to treat patients with challenging medical conditions, particularly those with COPD and emphysema;
- our expected future growth, including growth in international sales;
- our expected future growth of our sales and marketing organization;
- the size and growth potential of the markets for our products, and our ability to serve those markets;
- the rate and degree of market acceptance of our products;
- coverage and reimbursement for procedures performed using our products;
- the performance of third parties in connection with the development of our products, including third-party suppliers;
- regulatory developments in the United States and foreign countries;
- our ability to obtain and maintain regulatory approval or clearance of our products on expected timelines;
- our plans to research, develop and commercialize our products and any other approved or cleared product;
- our ability to retain and hire our senior management and other highly qualified personnel;

- the development, regulatory approval, efficacy and commercialization of competing products and technologies in our industry;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our ability to develop and maintain our corporate infrastructure, including our internal controls;
- our use of proceeds from this offering;
- our financial performance and capital requirements; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our products, as well as our ability to operate our business without infringing the intellectual property rights of others.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and achievements may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

INDUSTRY AND MARKET DATA

We obtained the industry, market and competitive position data used throughout this prospectus from our own internal estimates and research, as well as from independent market research, industry and general publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. In addition, while we believe the industry, market and competitive position data included in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled “Risk Factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us.

USE OF PROCEEDS

We estimate that the net proceeds to us from our issuance and sale of shares of our common stock in this offering will be approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional shares in full, based upon an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. A 1,000,000 share increase or decrease in the number of shares offered by us would increase or decrease the net proceeds to us from this offering by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to increase our financial flexibility, create a public market for our common stock and facilitate our future access to the capital markets. We currently intend to use the net proceeds from this offering as follows:

- approximately $ million to hire additional sales and marketing personnel and expand marketing programs in the United States, Europe and Asia Pacific to promote the sales of Zephyr Valves;
- approximately $ million to fund product development and research and development activities;
- in accordance with the terms of the Oxford Agreement and based on the amount drawn thereunder, to pay a success fee of $1.9 million to Oxford on the closing of this offering; and
- the remaining proceeds for working capital and general corporate purposes, including acquisitions or strategic investments in complementary businesses or technologies, although we do not currently have any plans for any such acquisitions or investments.

The expected use of net proceeds from this offering represents our intentions based upon our present plans and business conditions, which could change in the future as our plans and business conditions evolve. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the proceeds of this offering or the amounts that we will actually spend on the uses set forth above. Accordingly, our management will have significant flexibility in applying the net proceeds of this offering. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the growth of our business. Pending their use, we intend to invest the net proceeds of this offering in a variety of capital-preservation investments, including short- and intermediate-term, interest-bearing, investment-grade securities and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid any dividends on our capital stock. We currently intend to retain all available funds and any future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends in the foreseeable future. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements and other factors that our board of directors may deem relevant. We are subject to covenants under our loan agreements that place restrictions on our ability to pay dividends.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of December 31, 2019:

- on an actual basis;
- on a pro forma basis to reflect (1) the issuance of 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019; (2) the automatic conversion of all (a) shares of our convertible preferred stock outstanding as of December 31, 2019 and (b) shares of our convertible preferred stock issued as a result of the exercise of our convertible preferred stock warrants discussed in (1) above into an aggregate of 177,971,620 shares of our common stock which resulted in the reclassification of (A) the carrying value of our convertible preferred stock to common stock and additional paid-in capital and (B) our convertible preferred stock warrant liabilities to common stock and additional paid-in capital, in connection with such conversion, all of which will occur in connection with the closing of this offering; and (3) the filing of our amended and restated certificate of incorporation in connection with the closing of this offering; and
- on a pro forma as adjusted basis to reflect (1) the pro forma items described immediately above; (2) the issuance and sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us; and (3) the payment of a $1.9 million success fee to Oxford in accordance with the terms of the Oxford Agreement, reflected as a derivative liability.

Our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with “Use of Proceeds,” “Selected Consolidated Financial and Other Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	As of December 31, 2019		
	Actual	Pro forma	Pro forma as Adjusted[1]
	(unaudited)		
	(in thousands, except share and per share amounts)		
Cash and cash equivalents	$ 14,767	$ 17,028	$
Term loan[2][3]	$ 14,965	$ 14,965	
Convertible preferred stock warrant liability	—	—	
Derivative liability[2]	1,165	1,165	
Convertible preferred stock, $0.001 par value per share; 177,985,811 shares authorized, 175,832,872 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	205,339	—	
Stockholders' (deficit) equity:			
Common stock, $0.001 par value per share; 240,000,000 shares authorized, 21,002,874 shares issued and outstanding, actual; 198,974,494 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	19	197	
Additional paid-in capital	21,733	229,155	
Accumulated other comprehensive loss	1,373	1,373	
Accumulated deficit	(210,503)	(210,503)	
Total stockholders' (deficit) equity	$ (187,378)	$ 20,222	$
Total capitalization	$ 34,091	$ 36,352	$

(1) Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover of this prospectus), would increase (decrease) the amount of each of cash and cash equivalents, working capital, total assets, total stockholders' (deficit) equity and total capitalization by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase (decrease) the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming the assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover of this prospectus), remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

(2) Does not reflect the repayment in February 2020 of $17.3 million, including outstanding loan amount of $15.0 million, final payment of $1.3 million, amendment fees of $0.9 million and accrued interest of $0.1 million, under the Oxford Agreement.

(3) Does not reflect the CIBC Agreement and borrowings of $17.0 million thereunder in February 2020.

The number of shares of our common stock that will be outstanding after this offering is based on 198,974,494 shares of common stock outstanding as of December 31, 2019, which includes (i) 175,832,872 shares of common stock issuable upon the conversion of all of our outstanding shares of convertible preferred stock outstanding as of December 31, 2019, and (ii) 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019, and excludes:

- 32,793,421 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2019, at a weighted-average exercise price of $0.17 per share;
- 776,032 shares of our common stock reserved for issuance under our 2010 Stock Plan, which shares will cease to be available for issuance at the time our 2020 Equity Incentive Plan becomes effective;

- shares of our common stock reserved for future issuance pursuant to our 2020 Equity Incentive Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year;

- shares of common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year; and

- 4,155 shares of our common stock held as treasury stock.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after the closing of this offering.

As of December 31, 2019, our historical net tangible book deficit was $191.8 million, or $9.13 per share of our common stock. Our historical net tangible book deficit represents our total tangible assets (total assets less intangible assets, goodwill and deferred offering costs) less our total liabilities and our convertible preferred stock that is not included in equity. Our historical net tangible book value per share represents historical net tangible book value divided by the number of shares of our common stock outstanding as of December 31, 2019.

Our pro forma net tangible book value as of December 31, 2019 was $15.8 million, or $0.08 per share of common stock. Pro forma net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of December 31, 2019, after giving effect to the automatic conversion of (i) 175,832,872 shares of convertible preferred stock outstanding as of December 31, 2019 and (ii) 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019, into 177,971,620 shares of our common stock immediately upon the closing of this offering.

Our pro forma as adjusted net tangible book value represents our pro forma net tangible book value, plus the effect of the sale of shares of common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Our pro forma as adjusted net tangible book value as of December 31, 2019 would have been $ million, or $ per share of our common stock. This amount represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to investors participating in this offering. We determine dilution per share to investors participating in this offering by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by investors participating in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share		$
Historical net tangible book (deficit) value per share as of December 31, 2019	$ (9.13)	
Pro forma change in historical net tangible book deficit per share attributable to the pro forma transactions described in the preceding paragraphs	9.21	
Pro forma net tangible book value per share as of December 31, 2019	0.08	
Increase in pro forma net tangible book value per share attributed to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share after giving effect to this offering		
Dilution in pro forma as adjusted net tangible book value per share to new investors in this offering		$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase or decrease in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the pro forma as adjusted net tangible book value per share by $ per share and the dilution in pro forma as adjusted net tangible book value per share to new investors participating in this offering by $ per share, assuming that the number of shares offered by us, as set forth on

the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. A 1,000,000 share increase in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the pro forma as adjusted net tangible book value per share by $ and decrease the dilution per share to investors participating in this offering by $, assuming the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. A 1,000,000 share decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by $ and increase the dilution per share to new investors participating in this offering by $, assuming the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after estimated deducting underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will adjust based on the actual initial offering price to public and other terms of this offering determined at pricing.

If the underwriters exercise their option in full to purchase additional shares of our common stock in this offering, the pro forma as adjusted net tangible book value of our common stock would increase to $ per share, representing an immediate increase to existing stockholders of $ per share and an immediate dilution of $ per share to investors participating in this offering, in each case, assuming the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after estimated deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes as of December 31, 2019, on the pro forma as adjusted basis described above, the number of shares of our common stock, the total consideration and the average price per share (1) paid to us by our existing stockholders and (2) to be paid by investors purchasing our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Weighted-Average Price
	Number	Percent	Amount (in thousands)	Percent	Per Share
Existing stockholders	198,974,494	%	$ 228,284	%	$ 1.15
New investors					
Total		100%		100%	

If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors purchasing common stock in this offering would be increased to % of the total number of shares of our common stock outstanding after this offering.

The outstanding share information in the table above is based on 198,974,494 shares of our common stock outstanding as of December 31, 2019, which includes (i) 175,832,872 shares of common stock issuable upon the conversion of all of our outstanding shares of convertible preferred stock outstanding as of December 31, 2019, and (ii) 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019, and excludes:

- 32,793,421 shares of our common stock issuable upon the exercise of options outstanding as of December 31, 2019, at a weighted-average exercise price of $0.17 per share;

- 776,032 shares of our common stock reserved for issuance under our 2010 Stock Plan, which shares will cease to be available for issuance at the time our 2020 Equity Incentive Plan becomes effective;

- shares of our common stock reserved for future issuance pursuant to our 2020 Equity Incentive Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year;

- shares of our common stock reserved for future issuance under our 2020 Employee Stock Purchase Plan, which will become effective prior to the closing of this offering and will include provisions that automatically increase the number of shares of common stock reserved for issuance thereunder each year; and

- 4,155 shares of our common stock held as treasury stock.

To the extent any of the outstanding options described above are exercised, new options are issued or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA

We have derived the consolidated statements of operations data for the years ended December 31, 2018 and 2019 and the consolidated balance sheet data as of December 31, 2018 and 2019 from our audited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future.

When you read this selected consolidated financial and other data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this prospectus.

	Years Ended December 31,	
	2018	2019
	(in thousands, except share and per share amounts)	
Consolidated Statements of Operations Data:		
Revenue	$ 20,004	$ 32,595
Cost of goods sold	7,718	10,181
Gross profit	12,286	22,414
Operating expenses:		
Research and development	6,991	6,049
Selling, general and administrative	20,347	34,203
Total operating expenses	27,338	40,252
Loss from operations	(15,052)	(17,838)
Interest income	21	432
Interest expense	(2,520)	(2,317)
Other income (expense), net	(916)	(617)
Net loss before tax	(18,467)	(20,340)
Income tax expense	12	363
Net loss	$ (18,479)	$ (20,703)
Net loss per share attributable to common stockholders, basic and diluted[(1)]	$ (1.10)	$ (1.17)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted[(1)]	16,748,545	17,761,858
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)[(1)]		$ (0.11)
Weighted-average shares used in computing pro forma net loss per share, basic and diluted (unaudited)[(1)]		180,925,287

(1) For an explanation of the method used to calculate our historical and pro forma basic and diluted net loss per share, and weighted average number of shares used in the computation of per share amounts, see Note 12 to our consolidated financial statements included elsewhere in the prospectus.

	As of December 31,	
	2018	2019
	(in thousands)	
Consolidated Balance Sheet Data:		
Cash, cash equivalents and short-term marketable securities	$ 4,124	$ 28,347
Working capital[(1)]	3,236	26,910
Total assets	15,013	53,533
Derivative Liability	642	1,165
Term loan	14,937	14,965
Convertible note payable to related party	18,668	—
Convertible preferred stock warrant liability	12	—
Total liabilities	41,804	35,572
Convertible preferred stock	140,535	205,339
Accumulated deficit	(189,800)	(210,503)
Total stockholders' (deficit) equity	(167,326)	(187,378)

(1) We define working capital as current assets less current liabilities. See our audited consolidated financial statements and the related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities as of December 31, 2018 and 2019.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section entitled "Selected Consolidated Financial and Other Data" and our audited consolidated financial statements and related notes thereto included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations and intentions, that are based on the beliefs of our management, as well as assumptions made by, and information currently available to, our management. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section of this prospectus entitled "Risk Factors."

Overview

We are a commercial-stage medical technology company that provides a minimally invasive treatment for patients with severe emphysema, a form of chronic obstructive pulmonary disease (COPD). Our solution, which is comprised of the Zephyr Endobronchial Valve (Zephyr Valve), the Chartis Pulmonary Assessment System (Chartis System) and the StratX Lung Analysis Platform (StratX Platform), is designed to treat severe emphysema patients who, despite medical management, are still profoundly symptomatic and either do not want or are ineligible for surgical approaches. We estimate our solution currently addresses approximately 500,000 patients in the United States and 700,000 patients in select international markets, which represents a global market opportunity of approximately $12 billion.

We have a compelling body of clinical evidence with over 100 scientific articles published regarding the clinical benefits of Zephyr Valves, including in *The New England Journal of Medicine*, *The Lancet* and the *American Journal of Respiratory and Critical Care Medicine*. Multiple randomized controlled clinical trials have demonstrated that patients selected with the Chartis System and successfully treated with Zephyr Valves have shown statistically and clinically significant improvements in lung function, exercise capacity and quality of life compared to medical management alone.

In June 2018, we received pre-market approval (PMA) by the U.S. Food and Drug Administration (FDA) as a result of our breakthrough technology designation. The Zephyr Valve is now commercially available in more than 25 countries, with over 76,000 valves used to treat more than 19,000 patients through December 31, 2019. We have established reimbursement in major markets in North America, Europe and Asia Pacific and the Zephyr Valve has been included in treatment guidelines for COPD worldwide.

We market and sell our products in the United States through a direct sales organization consisting of 32 sales territory managers as of December 31, 2019. Our sales territory managers are focused on promoting awareness and increasing adoption of our solution primarily among the approximately 800 pulmonologists performing interventional pulmonary procedures and across approximately 500 high volume hospitals in the United States. As of December 31, 2019, we had 26 sales territory managers outside the United States, with 18 in Europe and eight in Asia Pacific. We are expanding our commercial operations in the United States while continuing to foster our international growth. We employ both direct and distributor-based sales models, with over 90% of our revenue generated in markets where we sell directly.

In the United States, our solution is reimbursed based on established Category I Current Procedural Terminology (CPT) and ICD-10 Procedure Coding System (PCS) codes and associated MS-DRG and APC payment groupings. Current reimbursement in the United States is generally sufficient to cover the hospital costs of the procedure and related inpatient care. Commercial payors such as Aetna and Humana have issued positive coverage policies for the Zephyr Valve, and United Healthcare no longer considers the procedure unproven or experimental. Medicare covers our solution for patients when medically necessary, and other commercial insurers are approving pre-authorization requests on a case-by-case basis. Outside the United States, our solution is covered by major health systems across much of Europe, Australia and South Korea.

We manufacture all our products at our headquarters in Redwood City, California. This facility supports production and distribution operations, including manufacturing, quality control, raw material and finished goods storage. We have manufactured all our products at this facility for over ten years. We seek to maintain higher levels of inventory to protect ourselves from supply interruptions and have an established distribution system for both U.S. and international customers.

To date, we have financed our operations primarily through private placements of equity securities, debt financing arrangements and sales of our products. We have devoted substantially all of our resources to research and development activities related to our solution, including clinical and regulatory initiatives to obtain marketing approval, and sales and marketing activities. We generated revenue of $32.6 million, with a gross margin of 68.8% and a net loss of $20.7 million, for the year ended December 31, 2019 compared to revenue of $20.0 million, with a gross margin of 61.4% and a net loss of $18.5 million, for the year ended December 31, 2018. As of December 31, 2019, we had an accumulated deficit of $210.5 million, cash and cash equivalents of $14.8 million, short-term marketable securities of $13.6 million, and $15.0 million of outstanding term loans.

We have invested heavily in product development. Our research and development activities have been centered on driving continuous improvements to our solution. We have also made significant investments in clinical studies to demonstrate the safety and efficacy of the Zephyr Valve and to support regulatory submissions. We intend to make significant investments building our sales and marketing organization by increasing the number of sales territory managers and continuing our marketing efforts in existing and new markets throughout the United States, Europe and Asia Pacific. We also intend to continue to make investments in research and development efforts to develop our next generation products and support our future regulatory submissions to increase our addressable market and to expand indications and new markets. Because of these and other factors, we expect to continue to incur net losses for the next several years and we expect to require substantial additional funding, which may include future equity and debt financings.

The table below sets forth our revenue from U.S. and international sales over the past two years on a quarterly basis.

	Three Months Ended (unaudited)							
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
	(in millions)							
Revenue from:								
U.S. sales	$ —	$ —	$ 0.1	$ 0.5	$ 0.8	$ 1.8	$ 3.4	$ 4.7
International sales	4.3	5.3	4.9	4.9	5.0	5.6	5.7	5.6
Total revenue	$ 4.3	$ 5.3	$ 5.0	$ 5.4	$ 5.8	$ 7.4	$ 9.1	$ 10.3

Our management has concluded, and in its report on our financial statements for the year ended December 31, 2019 our independent registered public accounting firm included an explanatory paragraph stating, that our recurring losses from operations and negative cash flows since inception and our need to raise additional funding to finance our operations raise substantial doubt about our ability to continue as a going concern. See “Risk Factors—Risks Related to Our Financial Position and Need for Additional Capital—Our history of recurring losses and anticipated expenditures raise substantial doubts about our ability to continue as a going concern. Our ability to continue as a going concern requires that we obtain sufficient funding to finance our operations.”

Factors Affecting our Business and Results of Operations

We believe there are several important factors that have impacted and that we expect will continue to impact our business and results of operations. These factors include:

Our Ability to Recruit, Train and Retain Our Sales Force and its Productivity

We have made, and intend to continue to make, significant investments in recruiting, training and retaining our direct sales force. This process requires significant education and training for our sales personnel to achieve the level of technical competency with our products that is expected by physicians and to gain experience building demand for our products. Upon completion of the training, our sales personnel typically require time in the field to grow their network of accounts and increase their productivity to the levels we expect. Successfully recruiting, training and retaining additional sales personnel will be required to achieve growth. In addition, inability to attract qualified sales personnel or the loss of any productive sales personnel would have a negative impact on our ability to grow our business. As of December 31, 2019, we had 32 sales territory managers in the United States and 26 sales territory managers outside the United States, with 18 in Europe and eight in Asia Pacific.

We have in the past and expect in the future to enter into different compensation arrangements with our sales professionals, which include minimum guaranteed commissions. This has impacted our compensation expenses in the past and we expect it will do so in the future.

Physician, Patient and Hospital Awareness and Acceptance of Our Solution

Our goal is to establish our solution as a standard of care for severe emphysema. We intend to continue to promote awareness of our solution through training and educating physicians, pulmonary rehabilitation centers, key opinion leaders and various medical societies on the proven clinical benefits of Zephyr Valves. In addition, we intend to continue to publish additional clinical data in various industry and scientific journals and online and to present at various industry conferences. We plan to continue building patient awareness through our direct-to-patient marketing initiatives, which include advertising, social media and online education. We also intend to continue helping physicians in their outreach to patients and other healthcare providers. These efforts require significant investment by our marketing and sales organization, and vary depending upon the physician's practice specialization, and personal preferences and geographic location of physicians, pulmonary rehabilitation centers and patients. In order to grow our business, we will need to continue to make significant investments in training and educating hospitals, physicians and patients on the advantages of our solution for the treatment of severe emphysema.

Third-Party Reimbursement

Since achieving regulatory approval in the United States in June 2018, we have launched the Zephyr Valve treatment and have made progress securing third-party payor reimbursement. The majority of our patients are Medicare beneficiaries. We estimate that roughly 75% of the potential Zephyr Valve patient population are Medicare/Medicaid beneficiaries, of which approximately 25% have managed Medicare/Medicaid and the remaining 50% have traditional Medicare/Medicaid. Approximately 25% of the potential Zephyr Valve patient population is under third-party commercial payor policies. A key element of our strategy remains to broaden our coverage by private third-party payor policies. As of December 31, 2019, commercial payors such as Aetna, Humana, Priority Health and Emblem Health have issued positive coverage policies for endobronchial valve procedures. United Healthcare removed the endobronchial valve codes from their non-covered list, and as such no longer considers the procedure unproven or experimental. Other commercial payors, such as many plans in the Blue Cross Blue Shield family of plans, do not yet consider our solution medically necessary, but these same plans are approving pre-authorization requests on a case-by-case basis. Medicare, currently without a public coverage policy, covers our solution for patients when medically necessary on a case-by-case basis and other commercial insurers not described above are approving pre-authorization requests on a case-by-case basis.

We have a dedicated patient reimbursement support team in the United States that works collaboratively with patients and providers to help secure the appropriate prior authorization approvals in advance of treatment. We continue to educate private insurers in the United States on our clinical data and patient selection tools in an effort to continue to expand the number of positive coverage policies, in order to increase our revenue. Outside the United States, our solution is covered by major health systems across much of Europe, Australia and South Korea.

Competition

Our industry is highly competitive and subject to rapid change from the introduction of new products and technologies and other activities of industry participants. Our goal is to establish our solution as a standard of care for severe emphysema. Existing treatments include medical management, lung volume reduction surgery (LVRS), lung transplantation as well as other minimally invasive treatments. Some of our competitors have several competitive advantages, including established relationships with pulmonologists who commonly treat patients with emphysema, significantly greater name recognition and significantly greater sales and marketing resources. In addition to competing for market share, we also compete against these companies for personnel, including qualified sales and other personnel that are necessary to grow our business. Certain of our competitors may challenge our intellectual property, may develop additional competing or superior technologies and processes and compete more aggressively and sustain that competition over a longer period of time than we could. In addition to existing competitors, other companies may acquire or in-license competitive products and could directly compete with us. We must continue to successfully compete in light of our competitors' existing and future products and related pricing and their resources to successfully market to the physicians who use our products.

Leveraging Our Manufacturing Capacity is Critical to Improving Our Gross Margin

With our current operating model and infrastructure, we have the capacity to significantly increase our manufacturing production. If we grow our revenue and sell more units, our fixed manufacturing costs will be spread over more units, which we believe will reduce our manufacturing costs on a per-unit basis and in turn improve our gross margin. In addition, we intend to continue investing in manufacturing efficiencies in order to reduce our overall manufacturing costs. However, other factors will continue to impact our gross margins such as geographic mix, pricing and customer discounts, incentives, support services and potential seasonality.

Investing in Research and Development to Foster Innovation to Expand Our Addressable Market

We intend to continue investing in existing and next generation technologies to further improve our products and clinical outcomes, enhance patient selection and broaden the patient population that can be treated with our products. In addition, we are continuing to invest in the accuracy and features of our patient assessment tools. Moreover, we plan to conduct clinical research of AeriSeal, a potential product in development for the treatment of severe emphysema patients who are not qualified for Zephyr Valve treatment due to excessive collateral ventilation.

While research and development and clinical testing are time consuming and costly, we believe that a pipeline of new products and product enhancements that improve efficacy, safety and cost effectiveness is critical to increasing the adoption of our solution.

Seasonality

Historically, we have experienced seasonality outside of the United States, primarily in the first and third quarters and anticipate this trend to continue. In addition, as our sales grow in the United States, we may experience seasonality based on holidays, vacations and other factors because this is an elective procedure.

Components of Our Results of Operations

Revenue

We currently derive substantially all our revenue from the sale of our products to hospitals and distributors. We market and sell our products through a direct sales organization in the United States and through direct sales and several third-party distributors in select markets outside the United States. We currently generate most of our revenue from the sales of Zephyr Valves and delivery catheters. We also generate a smaller amount of our revenue from our Chartis System, which is comprised of sales of the balloon catheters, usage fees and sales of the Chartis console. The StratX Platform, while used to identify patients eligible for treatment with Zephyr Valves, does not independently generate any revenue for us. No single customer accounted for more than 10% of our revenue during the years ended December 31, 2018 and December 31, 2019.

Revenue from sales of our products fluctuates based on volume of cases (procedures performed), the average number of Zephyr Valves used for a patient, pricing, discounts, incentives and mix of U.S. and international sales. Our revenue also fluctuates and in the future will continue to fluctuate from quarter-to-quarter due to a variety of factors, including the availability of reimbursement, the size and success of our sales force, the number of hospitals and physicians who are aware of and perform the procedures using our solution and seasonality. Our revenue from international sales may also be impacted by fluctuations in foreign currency exchange rates between the U.S. dollar (our reporting currency) and the local currency.

Cost of Goods Sold and Gross Margin

Cost of goods sold consists primarily of payroll and personnel-related expenses for our manufacturing and quality assurance employees, costs related to materials, components and subassemblies, third-party costs, manufacturing overhead, equipment depreciation, charges for excess, obsolete and non-sellable inventories. Overhead costs include the cost of quality assurance, testing, material procurement, inventory control, operations supervision and management and an allocation facilities overhead cost, including rent and utilities. Cost of goods sold also includes depreciation expense for production equipment and certain direct costs such as those incurred for shipping our products and costs related to providing analysis services for patient scans. We record adjustments to our inventory valuation for estimated excess, obsolete and non-sellable inventories based on assumptions about future demand, past usage, changes to manufacturing processes and overall market conditions. We expect cost of goods sold to increase in absolute dollars to the extent more of our products are sold.

We calculate gross margin as gross profit divided by revenue. Our gross margin has been and will continue to be affected by a variety of factors, primarily by our manufacturing costs, pricing pressures and, to a lesser extent, the percentage of products we sell in the United States versus internationally and the percentage of products we sell to distributors versus directly to hospitals. Our gross margin is typically higher on products we sell directly to hospitals as compared to products we sell through distributors.

Our gross margin may increase over the long term to the extent our production volume increases as our fixed manufacturing costs would be spread over a larger number of units, thereby reducing our per-unit manufacturing costs. We expect our gross margin to fluctuate from period to period, however, based upon the factors described above and seasonality.

Operating Expenses

Our operating expenses have consisted solely of research and development costs and selling, general and administrative costs.

Research and Development Expenses

Our research and development activities primarily consist of engineering and research programs associated with our products under development and improvements to our existing products. Research and development expenses

include payroll and personnel-related costs for our research and development employees, including expenses related to stock-based compensation for employees engaged in research and development, consulting services, clinical trial expenses, regulatory expenses, prototyping, testing, laboratory supplies, and an allocation of facility overhead costs. Our clinical trial expenses include costs associated with clinical trial design, clinical trial site development and study costs, data management costs, related travel expenses, the cost of products used for clinical activities, and internal and external costs associated with our regulatory compliance. We expense research and development costs as they are incurred. We expect our research and development expenses, including related stock-based compensation expense, to increase in absolute dollars as we hire additional personnel to develop new product offerings and product enhancements.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses consist of payroll and personnel-related costs for our sales and marketing personnel, including sales variable compensation, travel expenses, consulting, public relations costs, direct marketing, customer training, trade show and promotional expenses, stock-based compensation and allocated facility overhead costs, and for administrative personnel that support our general operations such as information technology, executive management, financial accounting, customer services and human resources personnel. We expense sales variable compensation at the time of the sale. Selling, general and administrative expenses also include costs attributable to professional fees for legal and accounting services, insurance, consulting fees, recruiting fees, travel expense, bad debt expense and depreciation.

We intend to continue to increase the size of our sales force and our marketing spending to generate sales opportunities. We expect our sales and marketing expenses to increase in absolute dollars as we hire additional sales personnel and increase our sales support infrastructure and add additional marketing programs in order to more fully penetrate the global opportunity. We also expect our administrative expenses, including stock-based compensation expense, to increase as we increase our headcount and expand our facility and information technology to support our operations as a public company. Additionally, we anticipate increased expenses related to audit, legal, regulatory and tax-related services associated with being a public company, compliance with exchange listing and Securities and Exchange Commission (SEC) requirements, director and officer insurance premiums and investor relations costs. We also expect to see an increase in our stock-based compensation expense with the establishment of a new equity plan associated with this offering and related grants either in the form of restricted stock units or options. Our selling, general and administrative expenses may fluctuate from period to period due to the seasonality of our business and as we continue to add direct sales territory managers in new territories.

Interest Expense and Income

Interest expense consists primarily of interest expense related to our term loan facilities, including amortization of debt discount and issuance costs. Interest income is predominantly derived from investing surplus cash in money market funds and short-term marketable securities.

Other Income (Expense), Net

Other income (expense), net primarily consists of changes in the fair value of our derivative liability, changes in the fair value of our outstanding convertible preferred stock warrants and foreign currency exchange gains and losses. We will continue to adjust the convertible preferred stock warrant liability for changes in fair value until the exercise or expiration of the warrants in February 2020. Upon exercise or expiration of the warrants, the final fair value of the warrant liability will be reclassified to stockholders' (equity)/deficit and we will no longer record any related periodic fair value adjustment. We will continue to adjust the derivative liability for changes in fair value at each balance sheet date until the payment of the success fee to Oxford upon the completion of our initial public offering, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss.

Results of Operations:

Comparison of the Years Ended December 31, 2018 and December 31, 2019

The following table summarizes our results of operations for the period indicated:

	Years Ended December 31,			
	2018	2019	$ Change	% Change
	(in thousands)			
Revenue	$ 20,004	$ 32,595	$ 12,591	62.9 %
Costs of goods sold	7,718	10,181	$ 2,463	31.9 %
Gross profit	12,286	22,414	10,128	82.4 %
Operating expenses:				
Research and development	6,991	6,049	$ (942)	(13.5)%
Selling, general and administrative	20,347	34,203	$ 13,856	68.1 %
Total operating expenses	27,338	40,252	12,914	47.2 %
Loss from operations	(15,052)	(17,838)	(2,786)	18.5 %
Interest income	21	432	$ 411	—
Interest expense	(2,520)	(2,317)	$ 203	(8.1)%
Other income (expense), net	(916)	(617)	$ 299	(32.6)%
Net loss before tax	(18,467)	(20,340)	(1,873)	10.1 %
Income tax expense	12	363	351	—
Net loss	$ (18,479)	$ (20,703)	$ (2,224)	12.0 %

Revenue

Revenue increased by $12.6 million, or 62.9%, to $32.6 million during the year ended December 31, 2019, compared to $20.0 million during the year ended December 31, 2018. The increase in revenue was due to an increase in the sale of products in the United States by $10.1 million from $0.6 million for the year ended December 31, 2018 to $10.7 million for the year ended December 31, 2019 and an increase in the sale of products in international markets by $2.5 million from $19.4 million for the year ended December 31, 2018 to $21.9 million for the year ended December 31, 2019. We obtained FDA approval for the Zephyr Valves in the United States in June 2018 and began generating revenue in the United States in the third quarter of 2018. Overall, there was an increase in the number of units of products sold for the year ended December 31, 2019 as compared to the year ended December 31, 2018. Unit growth paralleled the growth in revenue dollars for 2019 while average selling prices maintained their 2018 levels showing a small improvement.

Cost of Goods Sold and Gross Margin

Cost of goods sold increased by $2.5 million, or 31.9%, to $10.2 million during the year ended December 31, 2019, compared to $7.7 million during the year ended December 31, 2018. The increase was primarily due to growth in sales volume and additional manufacturing overhead costs as we invested in our operational infrastructure to support anticipated future growth. Our gross margin increased from 61.4% for the year ended December 31, 2018 to 68.8% for the year ended December 31, 2019. The increase in gross margin was primarily due to lower fixed costs per unit from the increased sales volume of our products.

Research and Development Expenses

Research and development expenses decreased by $0.9 million, or 13.5%, to $6.0 million during the year ended December 31, 2019, compared to $7.0 million during the year ended December 31, 2018. The decrease in research and development expenses was primarily due to a decrease of $0.7 million of costs associated with our clinical trials, including fees paid to contract research organizations (CROs) and consulting costs due to lower clinical trial activity during the year ended December 31, 2019.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by $13.9 million, or 68.1%, to $34.2 million during the year ended December 31, 2019, compared to $20.3 million during the year ended December 31, 2018. This increase in selling, general and administrative expenses was primarily due to an increase of $8.8 million of payroll and personnel-related expenses for our sales personnel, an increase of $1.0 million of payroll and personnel-related expenses for our administrative personnel, an increase of $2.0 million of professional fees for legal, consulting, accounting, tax and other services, an increase of $1.2 million of travel related expenses and $0.4 million of advertising and marketing materials.

Interest Expense and Income

Interest expense decreased by $0.2 million, or 8.1%, to $2.3 million during the year ended December 31, 2019, compared to $2.5 million during the year ended December 31, 2018 primarily due to lower interest on convertible note payable to a related party because our convertible debt from Boston Scientific Corporation (BSC) converted into shares of our Series G-1 convertible preferred stock in April 2019. Interest income increased by $0.4 million from the year ended December 31, 2018 to the year ended December 31, 2019 primarily due to interest income on proceeds from issuance of Series G-1 convertible preferred stock invested in cash equivalents and short-term marketable securities.

Other Income (Expense), Net

Other income (expense), net decreased by $0.3 million, or 32.6%, to $0.6 million during the year ended December 31, 2019, compared to $0.9 million during the year ended December 31, 2018, primarily due to lower net foreign exchange losses of $0.1 million.

Selected Quarterly Results of Operations

The following tables set forth selected unaudited quarterly consolidated statements of operations data for each of the quarters in the year ended December 31, 2019. The information for each of these quarters has been prepared in accordance with U.S. generally accepted accounting principles (GAAP) and on the same basis as our audited financial statements included elsewhere in this prospectus and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of our results of operations. This data should be read in conjunction with our financial statements and related notes included elsewhere in this prospectus. These quarterly operating results are not necessarily indicative of our operating results for the full year or any future period.

	Three Months Ended (unaudited)			
	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
	(in thousands)			
Revenue	$ 5,778	$ 7,366	$ 9,104	$ 10,347
Costs of goods sold	2,061	2,413	2,697	3,010
Gross profit	3,717	4,953	6,407	7,337
Operating expenses:				
Research and development	1,595	1,452	1,399	1,603
Selling, general and administrative	7,201	8,357	8,621	10,024
Total operating expenses	8,796	9,809	10,020	11,627
Loss from operations	(5,079)	(4,856)	(3,613)	(4,290)
Interest income	—	143	167	122
Interest expense	(876)	(531)	(460)	(450)
Other income (expense), net	(112)	(261)	(340)	96
Net loss before tax	(6,067)	(5,505)	(4,246)	(4,522)
Income tax expense	61	66	89	147
Net loss	$ (6,128)	$ (5,571)	$ (4,335)	$ (4,669)

Liquidity and Capital Resources; Plan of Operation

To date, we have financed our operations primarily through private placements of equity securities, debt financing arrangements and sales of our products. As of December 31, 2019, we had cash, cash equivalents and short-term marketable securities of $28.3 million, an accumulated deficit of $210.5 million, and $15.0 million outstanding under our loan and security agreement with Oxford. As of December 31, 2019, accrued interest on our loan and security agreements with Oxford was $1.7 million.

Oxford Term Loan

From August 2014 until February 2020, we were party to a Loan and Security Agreement with Oxford (Oxford Agreement), which provided us with the ability to borrow up to $20.0 million in term loans. The Oxford Agreement included a floating interest rate tied to LIBOR and included customary representations and warranties, restrictive covenants, events of default and other customary terms and conditions. As of December 31, 2019, the Company was in default with a covenant in the Oxford Agreement resulting from its failure to maintain cash balances outside the United States within the levels set forth in the Oxford Agreement. This event of default was waived by Oxford. The loan was collateralized by a first-priority lien on substantially all of our assets, including cash and cash equivalents, accounts receivable, intellectual property and equipment.

In May 2017, we entered into an amendment to the Oxford Agreement, and in May 2018 we entered into two additional amendments. Each of the amendments extended the “interest only period” under the loan, during which the loan accrued interest, but were not required to make principal payments.

In connection with the closing of the Oxford Agreement in August 2014, we also entered into a Success Fee Agreement, which requires us to pay up to $2.5 million (the Success Fee) in the event of a sale or other disposition by us of all or substantially all of our assets, a merger or consolidation or an initial public offering (a Liquidity Event), in each case before August 28, 2021. This agreement has been identified as a freestanding derivative under Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 815 (ASC 815), and is remeasured to its fair value at the end of each reporting period and any change in fair value is recognized as change in fair value of derivative liability in the statements of operations and comprehensive loss. We borrowed a total of $15.0 million principal amount of term loans under the Oxford Agreement, which based on the formula in the Success Fee Agreement, will obligate us to pay a Success Fee of $1.9 million on the closing of this offering.

In 2018 and 2019, we recorded interest expense on the term loan of $1.7 million and $1.7 million, respectively.

We incurred fees and legal expenses of $0.1 million in connection with the Oxford Agreement and related Amendments, which are recorded as deferred financing costs and amortized to interest expense. We also paid $0.2 million in fees to Oxford which is reflected as a discount on the debt and is being accreted over the life of the term loan. In 2018 and 2019, we recorded interest expense related to deferred financing and debt issuance costs of less than $0.1 million and less than $0.1 million, respectively.

In February 2020, we terminated and paid off in full $17.3 million, including outstanding loan amount of $15.0 million, final payment of $1.3 million, amendment fees of $0.9 million and accrued interest of $0.1 million, outstanding under the Oxford Agreement. All of our obligations under the Oxford Agreement have been terminated except the indemnity obligation thereunder, which by their terms survive the facility. The Success Fee Agreement also remains in full force and effect.

Loan and Security Agreement with BSC

From May 2017 until January 2020, we were party to a Second Lien Loan and Security Agreement with BSC (BSC Agreement), which provided us with the ability to borrow up to $30.0 million in term loans. The BSC Agreement included a fixed interest rate of 8.96% and included customary representations and warranties, restrictive covenants, events of default and other customary terms and conditions.

The BSC Agreement provided for principal and accrued interest on the loans to convert into our stock at BSC's option upon completion by us of any Qualified Equity or Debt Financing, or the occurrence of any Change of Control or Liquidation (each term as defined in the BSC Agreement).

In conjunction with the BSC Agreement, we and BSC entered into a No Shop Agreement such that from the date of execution of the agreement through the earlier of ten days following receipt by BSC of a letter confirming our submission of the final module of our PMA application to the FDA and March 31, 2018, we would not sign a term sheet or engage in discussions to sell our company. The No Shop Agreement terminated in 2018.

In addition, BSC's Right of First Negotiation, originally received as part of BSC's investment in our Series F-1 Preferred Stock, was amended to shorten the period it has to exercise its Right of First Negotiation from ten to five business days, and to shorten the exclusive negotiation period from 75 to 45 days with respect to the initial notice from us that we intend to pursue a change in control or an initial public offering. For subsequent notices from us, BSC has ten days to exercise its right of first negotiation, and 75 days to enter into definitive agreements for a change in control transaction. We have provided an initial notice to BSC of our intention to pursue this initial public offering and BSC has declined to exercise its Right of First Negotiation. BSC's Right of First Negotiation will terminate in connection with the closing of this offering.

We borrowed $6.0 million in 2017, $12.0 million in 2018 and $6.0 million in January 2019 under the BSC Agreement.

We incurred fees and legal expenses of $0.1 million in connection with the BSC Agreement, which are reported on the balance sheet as a direct deduction from the face amount of the convertible note. Amortization of the issuance costs are calculated using the effective interest rate method over the term of the note and recorded as a non-cash interest expense. In 2018, we recorded interest expense of $0.8 million.

In April 2019, all outstanding indebtedness and accrued interest under the BSC Agreement converted into shares of our Series G-1 preferred stock. At December 31, 2019, we retained the ability to draw up to an additional $6.0 million under the BSC Agreement until the maturity date in May 2022. We terminated the BSC Agreement in January 2020, which terminated all of our obligations under the BSC Agreement except the indemnity obligation thereunder, which by their terms survive the facility.

CIBC Term Loan

On February 20, 2020, we executed a Loan and Security Agreement (the CIBC Agreement) with Canadian Imperial Bank of Commerce (CIBC) which provided us with the ability to borrow up to $32.0 million in debt financing consisting of $17.0 million advanced at the closing of the agreement (Tranche A), with the option to draw up to an additional $8.0 million (Tranche B) on or before February 20, 2022. The term loan provides for an additional financing tranche (Tranche C) of up to $7.0 million on or prior to February 20, 2022, which is conditioned upon achieving a trailing six-month revenue of at least $20.0 million as of the date of any Tranche C borrowing. The availability of Tranche B and Tranche C is further conditioned upon the joining of PulmonX International Sàrl to the CIBC Agreement and the execution by PulmonX International Sàrl of Swiss-law collateral documentation in favor of CIBC.

The loan will mature in 60 months. Equal monthly principal payments will begin after a 24-month interest only grace period. The interest only grace period can extend to 36 months if we achieve three-month trailing revenue of at least $20.0 million as of February 20, 2022.

The loan bears interest at a floating rate equal to 1.0% above the Wall Street Journal Prime Rate at any time. The loan is collateralized by substantially all of our assets, including cash and cash equivalents, accounts receivable, intellectual property and equipment. We may prepay the loan, subject to certain requirements. The CIBC Agreement includes customary restrictive covenants, financial covenants, events of default and other customary terms and conditions.

Funding Requirements

We expect to incur continued expenditures in the future in support of our commercial infrastructure, sales force and other commercialization efforts. In addition, we intend to continue to make investments in the development of our products, including ongoing research and development programs. We also expect to incur additional costs associated with operating as a public company. Lastly, we may also undertake additional expenses to further expand our commercial organization and efforts, enhance our research and development efforts and pursue product expansion opportunities.

As of December 31, 2019, we had cash, cash equivalents and short-term marketable securities of $28.3 million. Based on our current planned operations, we expect that the anticipated proceeds of this offering, together with our cash, cash equivalents and short-term marketable securities will enable us to fund our operating expenses for at least 12 months from the date hereof. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

However, our management has concluded that our history of recurring losses and anticipated expenditures for operating and investing activities raise substantial doubt about our ability to continue as a going concern. See Note 1 to our consolidated financial statements appearing at the end of this prospectus for additional information on our conclusion. Similarly, the report of our independent registered public accounting firm on our consolidated financial statements as of and for the year ended December 31, 2019 included an explanatory paragraph indicating that there is substantial doubt about our ability to continue as a going concern. See “Risk Factors—Our history of recurring losses and anticipated expenditures raise substantial doubts about our ability to continue as a going concern. Our ability to continue as a going concern requires that we obtain sufficient funding to finance our operations” for further information.

Because of the numerous risks and uncertainties associated with research, development and commercialization of medical devices, we are unable to estimate the exact amount of our working capital requirements. Our future funding requirements will depend on many factors, including:

- the costs of commercialization activities related to commercializing our products in the United States and elsewhere, including expanding territories, increasing sales and marketing personnel, actual and anticipated product sales, marketing programs, manufacturing and distribution costs;

- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the research and development activities we intend to undertake, product enhancements that we intend to pursue;
- whether or not we pursue acquisitions or investments in businesses, products or technologies that are complementary to our current business;
- the degree and rate of market acceptance of our products in the United States and elsewhere;
- changes or fluctuations in our inventory supply needs and forecasts of our supply needs;
- our need to implement additional infrastructure and internal systems;
- our ability to hire additional personnel to support our operations as a public company; and
- the emergence of competing technologies or other adverse market developments.

Until such time, if ever, as we can generate product revenue sufficient to achieve profitability, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings and collaborations or licensing arrangements. There can be no assurance that our efforts to procure additional financing will be successful or that, if they are successful, the terms and conditions of such financing will be favorable to us or our stockholders. If we do raise additional capital through public or private equity or convertible debt offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional capital through collaborations agreements, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses that may not be favorable to us. If we are unable to raise capital when needed, we will need to delay, limit, reduce or terminate planned commercialization or product development activities, or grant rights to develop and commercialize products or product candidates that we would otherwise prefer to develop and market ourselves in order to reduce costs.

Summary Statement of Cash Flows

The following table sets forth the primary sources and uses of cash and cash equivalents for the period presented below:

	Years Ended December 31,	
	2018	2019
	(in thousands)	
Net cash (used in) provided by:		
Operating activities	$ (18,394)	$ (20,765)
Investing activities	200	(14,233)
Financing activities	12,114	45,619
Effect of exchange rate changes on cash and cash equivalents	154	22
Net increase (decrease) increase in cash and cash equivalents	$ (5,926)	$ 10,643

Cash Flows from Operating Activities

Net cash used in operating activities was $18.4 million for the year ended December 31, 2018. Cash used in operating activities was primarily a result of the net loss of $18.5 million, an increase in accounts receivable of $0.3 million due to an increase in sales, an increase in inventory of $1.2 million to support projected increases in sales, a decrease in accounts payable of $0.6 million due to timing of payments to vendors, a decrease in deferred tax liability of $0.2 million, a decrease of $0.1 million in deferred rent liability partially offset by, an increase in accrued liabilities of $0.9 million due to timing of payments to vendors, change in the fair value of the derivative liability of $0.6 million, depreciation and amortization expense of $0.3 million, stock-based compensation expense of $0.4 million and write down of inventory due to obsolescence of $0.3 million.

Net cash used in operating activities was $20.8 million for the year ended December 31, 2019. Cash used in operating activities was primarily a result of the net loss of $20.7 million, an increase in accounts receivable of $2.5 million primarily due an increase in sales, an increase in inventory of $2.6 million primarily due to higher inventory levels required to support higher sales and projected increase in sales and an increase in prepaid and other current assets of $0.7 million partially offset by, an increase in accrued liabilities of $3.4 million, an increase in accounts payable of $0.5 million, a change in the fair value of the derivative liability of $0.5 million, depreciation and amortization expense of $0.4 million, stock-based compensation expense of $0.4 million and a write down of inventory due to obsolescence of $0.3 million. The increases in prepaid expenses and other current assets, accrued liabilities and accounts payable is primarily due to increases in inventory, an increase in manufacturing, selling, general and administrative expenses and timing of payments to our vendors.

Cash Flows from Investing Activities

Net cash provided by investing activities in the year ended December 31, 2018 was $0.2 million primarily consisting of maturities of investments of $0.5 million, offset by the purchases of property and equipment of $0.3 million.

Net cash used in investing activities in the year ended December 31, 2019 was $14.2 million primarily consisting of purchases of short-term marketable securities of $21.5 million and purchases of property and equipment of $0.7 million offset by maturities of investments of $7.9 million.

Cash Flows from Financing Activities

Net cash provided by financing activities in the year ended December 31, 2018 of $12.1 million primarily relates to proceeds of $12.0 million from additional borrowings under the BSC Agreement and proceeds of $0.1 million from the exercise of stock options and preferred stock warrants.

Net cash provided by financing activities in the year ended December 31, 2019 of $45.6 million primarily relates to proceeds of $6.0 million from the issuance of the convertible note to BSC, proceeds of $39.7 million from issuance of Series G-1 convertible preferred stock, net of issuance costs and $0.5 million proceeds from the exercise of stock options offset by payment of deferred offering costs of $0.6 million.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of December 31, 2019:

	Payments Due by Period (in thousands)				
	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
Lease obligations[1]	$ 1,193	$ 4,757	$ 2,700	$ —	$ 8,650
Long-term debt obligations[2]	10,699	7,652	—	—	18,351
	$ 11,892	$ 12,409	$ 2,700	$ —	$ 27,001

(1) We lease our laboratory and office facilities in Redwood City, California and Neuchâtel, Switzerland under non-cancelable operating leases with expiration dates in July 2025 and January 2020, respectively. We had an option to extend the lease of the facility in Neuchâtel, Switzerland through January 2022 by providing notice to the landlord by the end of January 2019, which was not exercised by us. Per the terms of the lease, if the option to extend is not exercised, the lease remains in force and can be terminated with a 12-month's notice. The minimum lease payments above do not include any related common area maintenance charges or real estate taxes.

(2) In April 2019, all convertible promissory notes converted into shares of our Series G-1 convertible preferred stock. At December 31, 2019, we retained the ability to draw up to an additional $6.0 million under the BSC Agreement until the maturity date in May 2022. We terminated the BSC Agreement in January 2020. As of December 31, 2019, we had $15.0 million of principal balance outstanding under the Oxford Agreement. In February 2020, we terminated and paid off in full all amounts outstanding under the Oxford Agreement.

We enter into contracts in the normal course of business with third-party contract organizations for pre-clinical studies and testing, manufacture and supply of our pre-clinical materials and providing other services and products for operating purposes. These contracts generally provide for termination following a certain period after notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Off-Balance Sheet Arrangements

Through December 31, 2019, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies, Significant Judgments and Use of Estimates

Our financial statements have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses incurred during the reporting periods. Our estimates are based on our knowledge of current events and actions we may undertake in the future and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may materially differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates. For more detail on our critical accounting policies, refer to Note 2 to the financial statements appearing elsewhere in this prospectus.

Revenue Recognition

Our revenue is generated from the sale of our products to distributors and hospitals in the U.S. and international markets. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring the products. Revenue is recognized when obligations under the terms of a contract with customers are satisfied, which occurs with the transfer of control of our products to our customers, either upon shipment of the product or delivery of the products to the customer under the terms and conditions agreed with the customer. We defer revenue relating to any remaining performance obligations by us to the customer after delivery, such as free products and free analysis services of patient scans to determine suitability of the patients for the treatment using the Zephyr Valves.

We identify performance obligations in contracts with customers, which may include our products and implied promises to provide free products and analysis services for patient scans. The transaction price is determined based on the amount expected to be entitled to in exchange for transferring the promised services or product to the customer. We are entitled to the total consideration for the products ordered by customers, net of early pay discounts, volume-based rebates and other transaction price adjustments. We exclude taxes assessed by governmental authorities on revenue-producing transactions from the measurement of the transaction price. We accept product returns at our discretion or if the product is defective as manufactured. We elected to treat shipping and handling costs as a fulfillment cost and include them in the cost of goods sold as incurred.

Inventories

Inventories are valued at the lower of cost to purchase or manufacture the inventory or net realizable value. Cost is determined using the first-in, first-out method for all inventories. Net realizable value is determined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. We record write-downs of inventories which are obsolete or in excess of anticipated demand or market value based on consideration of product lifecycle stage, technology trends, product development plans and assumptions about future demand and market conditions. Inventory write-downs are intended to reduce the carrying value of inventory to its net realizable value.

Research and Development

Research and development expenses consist of costs incurred to further our research and development activities and include compensation costs, stock-based compensation, engineering and research expenses, clinical trials and related expenses, regulatory expenses, manufacturing expenses incurred to build products for testing, allocated facilities costs, consulting fees and other expenses incurred to sustain our overall research and development programs. All research and development costs are expensed as incurred.

Clinical trial costs are a significant component of our research and development expenses. We have a history of contracting with third parties that perform various clinical trial activities on our behalf in the ongoing development of our product candidates. The financial terms of these contracts are subject to negotiations and may vary from contract to contract and may result in uneven payment flow. We accrue and expense costs of our clinical trial activities performed by third parties, including CROs and other service providers, based upon estimates of the work completed over the life of the individual study in accordance with associated agreements. We determine these estimates through discussion with internal personnel and outside service providers as to progress or stage of completion of trials or services pursuant to contracts with clinical research organizations and other service providers and the agreed-upon fee to be paid for such services.

Convertible Preferred Stock

We record all shares of convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. Our convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in certain events considered not solely within our control, such as a merger, acquisition or sale of all or substantially all of our assets, each of which we refer to as a deemed liquidation event, our convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. We have not adjusted the carrying values of the convertible preferred stock to its liquidation preference because a deemed liquidation event obligating us to pay the liquidation preferences to holders of shares of convertible preferred stock is not probable. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

Convertible Preferred Stock Warrants

We have issued freestanding warrants to purchase shares of convertible preferred stock. We accounted for these warrants as a liability in our financial statements because the underlying instrument into which the warrants are exercisable contains deemed liquidation provisions that are outside our control. The warrants were recorded at fair value using an option pricing model based on an allocation of our aggregate value to the outstanding equity instruments, applying a discount to the warrant value for lack of marketability. The warrants were subject to remeasurement at each balance sheet date with any changes in fair value being recognized as a component of other income (expense), net in the statements of operations and comprehensive loss. We continued to adjust the liability for changes in fair value until the exercise or expiration of the convertible preferred stock warrants in February 2020 (see Note 16 to our consolidated financial statements) at which time the related final fair value of the warrant liability will be reclassified to stockholders’ deficit.

Common Stock Valuation and Stock-Based Compensation

We recognize compensation costs related to stock options granted to employees based on the estimated fair value of the awards on the date of grant. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option pricing model. The grant date fair value of stock-based awards is expensed on a straight-line basis over the period during which the optionee is required to provide service in exchange for the award, which is typically the vesting period. We account for forfeitures as they occur.

Up to December 31, 2018, the value of equity instruments issued to non-employees was determined on the earlier of the date on which there first existed a firm commitment for performance by the provider of goods and services or on the date performance is complete, using the Black-Scholes option pricing model. Therefore, the measurement of stock-based compensation issued to non-employees was subject to periodic adjustment as the underlying equity instruments vested. Stock-based compensation expense related to stock options granted to non-employees was recognized as the stock options are earned. Upon adoption of ASU 2018-07 for the periods after January 1, 2019, the Company accounts for shared-based awards granted to non-employees based on the fair value on the date of grant and recognizes compensation expense for those awards over the requisite service period, which is generally the vesting period of the respective award.

Estimates of the fair value of equity awards as of the grant date using valuation models such as the Black-Scholes option pricing model are affected by assumptions with a number of complex variables. Changes in the assumptions can materially affect the fair value and ultimately the amount of stock-based compensation expense recognized. These inputs are subjective and generally require significant analysis and judgment to develop. Changes in the following assumptions can materially affect the estimate of the fair value of stock-based compensation:

- *Expected Term.* The expected term is calculated using the simplified method, which is available where there is insufficient historical data about exercise patterns and post-vesting employment termination behavior. The simplified method is based on the vesting period and the contractual term for each grant, or for each vesting-tranche for awards with graded vesting. The mid-point between the vesting date and the maximum contractual expiration date is used as the expected term under this method. For awards with multiple vesting-tranches, the periods from grant until the mid-point for each of the tranches are averaged to provide an overall expected term.

- *Expected Volatility.* Effective 2019, the expected volatility is derived from the average historical volatilities of publicly traded companies within our industry that we consider to be comparable to our business over a period approximately equal to the expected term for the options. In 2018, the expected volatility for non-employee options was derived over a period approximately equal to the remaining contractual life of the option. In evaluating similarity, we considered factors such as stage of development, risk profile, enterprise value and position within the life sciences industry.

- *Risk-free Interest Rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of the grant for zero-coupon U.S. Treasury notes with remaining terms similar to the expected term of the options.

- *Dividend Rate.* We assumed the expected dividend to be zero as we have never paid dividends and have no current plans to do so.

Common Stock Valuation

The estimated fair value of the common stock underlying our stock options and stock awards was determined at each grant date by our board of directors, with input from management. All options to purchase shares of our common stock are intended to be exercisable at a price per share not less than the per-share fair value of our common stock underlying those options on the date of grant.

In the absence of a public trading market for our common stock, on each grant date, we develop an estimate of the fair value of our common stock based on the information known to us on the date of grant, upon a review of any recent events and their potential impact on the estimated fair value per share of the common stock, and in part on contemporaneous input from an independent third-party valuation firm.

Our valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (Practice Aid).

The assumptions used to determine the estimated fair value of our common stock are based on numerous objective and subjective factors, combined with management judgment, including:

- external market conditions affecting the pharmaceutical and medical devices industry and trends within the industry;
- our stage of development and business strategy;
- the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock;
- the prices at which we sold shares of our convertible preferred stock;
- our financial condition and operating results, including our levels of available capital resources;
- the progress of our research and development efforts;
- equity market conditions affecting comparable public companies; and
- general U.S. market conditions and the lack of marketability of our common stock.

For our valuations performed in August 2019, we applied the market approach outlined in the Practice Aid to determine our enterprise value. Specifically, we used the guideline public company analysis, which relies on an analysis of publicly traded companies similar in industry or business model to us and uses these guideline companies to develop relevant market multiples and ratios. These multiples and ratios were then applied to our corresponding financial metrics.

For our valuation performed in November 2019, we applied a weighted combination of the market approach and the income approach outlined in the Practice Aid to determine our enterprise value. Under the market approach, we used the guideline public company analysis, guideline transactions analysis and an analysis based on a recent acquisition offer. For the guideline public company and guideline transactions analysis, we identified a group of comparable public companies and recent transactions within our industry. For the comparable companies, we estimated market multiples and ratios. These multiples and ratios were then applied to our corresponding financial metrics. When selecting comparable companies, consideration was given to industry similarity, their specific products offered, financial data availability and capital structure. The income approach incorporates the use of a discounted cash flow model in which our estimated future cash flows and our residual value beyond the forecast period are discounted using an appropriately risk-adjusted weighted average cost of capital. Our forecasts used in the discounted cash flow model are based in part on strategic plans and represent our estimates based on current and forecasted business and market conditions.

The Practice Aid identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, we considered the following methods:

- *Option Pricing Method.* Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.

- *Probability-Weighted Expected Return Method.* The probability-weighted expected return method is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

We determined that the OPM method was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock. In determining the estimated fair value of our common stock, our board of directors also considered the fact that our stockholders could not freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock based on the weighted-average expected time to liquidity. The estimated fair value of our common stock at each grant date reflected a non-marketability discount partially based on the anticipated likelihood and timing of a future liquidity event.

Following the closing of this offering, our board of directors intends to determine the fair value of our common stock based on the closing sales price of our common stock on the date of grant of equity awards.

The intrinsic value of all outstanding options as of December 31, 2019 was approximately $ million, based on an assumed initial public offering price of $ per share (the midpoint of the estimated price range set forth on the cover of this prospectus), of which approximately $ million is related to vested options and approximately $ million is related to unvested options.

Income Taxes

Our major tax jurisdictions are the United States and California, Switzerland and Neuchâtel, and Grand Cayman.

We provide for income taxes under the asset and liability method. Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. Deferred income tax assets and liabilities arise due to differences between when assets or liabilities are recognized for tax purposes and when they are recognized for financial reporting purposes. Net operating losses and credit carryforwards are also deferred tax assets. Deferred tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when such items are expected to reverse. Deferred income tax assets are reduced, as necessary, by a valuation allowance when management determines it is more likely than not that some or all of the tax benefits will not be realized.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. All of our tax years will remain open for examination by the federal and state tax authorities for three and four years, respectively, from the date of utilization of the net operating loss or research and development credits. We do not have any tax audits or other issues pending.

Utilization of the net operating loss carryforwards and research and development tax credit carryforwards may be subject to annual limitations due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended (Code), as defined in Section 382, and other similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

The 2017 Tax Cut and Jobs Act included the implementation of a modified territorial tax system, which has the effect of subjecting earnings of our foreign subsidiaries to U.S. taxation on Global Intangible Low-Taxed Income (GILTI). The FASB allows companies to adopt a policy election to account for the tax on GILTI under one of two methods: (i) account for the tax on GILTI as a component of tax expense in the period in which the tax is incurred (the period cost method) or (ii) account for the tax on GILTI in a company's measurement of deferred taxes (the deferred method). We have elected to account for the tax on GILTI under the period cost method.

JOBS Act Accounting Election

The Jumpstart Our Business Startups Act of 2012 (JOBS Act) permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. However, we have chosen to irrevocably "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies.

Recent Accounting Pronouncements

See "Recent Accounting Pronouncements" in Note 3 to our consolidated financial statements included elsewhere in this prospectus for additional information.

Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

We are exposed to interest rate risks related to our cash, cash equivalents and borrowings. We had cash, cash equivalents and short-term marketable securities of $28.3 million as of December 31, 2019, which consist of cash, money market funds, commercial paper and corporate bonds. We held cash in foreign banks of approximately $5.2 million at December 31, 2019 that was not federally insured. Interest-earning money market funds carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant.

We had outstanding debt of $15.0 million as of December 31, 2019, with interest rate of 8.71%. In the ordinary course of business, we may enter into contractual arrangements to reduce our exposure to interest rate risks. We believe that a 10% change in interest rates would not have a significant impact on our consolidated financial statements.

Foreign Currency Exchange Risk

We operate in countries other than the United States and are exposed to foreign currency risks. Revenue from sales outside of the United States represented 67.2% of our total revenue for the year ended December 31, 2019. We bill most direct sales outside of the United States in local currencies, which are mostly comprised of the Swiss franc, the Euro, the British pound, and the Australian dollar. Operating expenses related to these sales are largely denominated in the same respective currency, thereby limiting our transaction risk exposure. We therefore believe that the risk of a significant impact on our operating income from foreign currency fluctuations is not significant. The risk of a significant impact on our operating income from foreign currency fluctuations will further diminish as revenue from sales to customers in the United States increases and represents a greater proportion of total revenues. A 10% change in weighted average foreign currency exchange rates would have changed our revenues and operating expenses for the year ended December 31, 2019 by approximately $2.3 million and $1.3 million, respectively, with a net impact of $1.0 million on our net income. We do not currently hedge our exposure to foreign currency exchange rate fluctuations; however, we may choose to hedge our exposure in the future.

BUSINESS

Overview

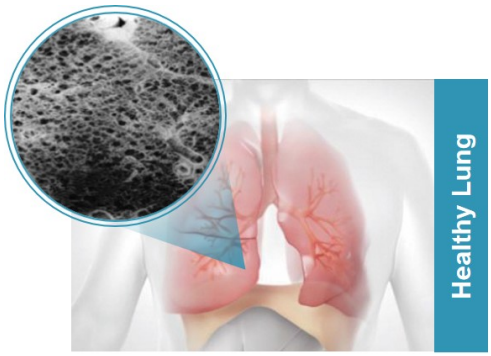
We are a commercial-stage medical technology company that provides a minimally invasive treatment for patients with severe emphysema, a form of chronic obstructive pulmonary disease (COPD). Our solution, which is comprised of the Zephyr Endobronchial Valve (Zephyr Valve), the Chartis Pulmonary Assessment System (Chartis System) and the StratX Lung Analysis Platform (StratX Platform), is designed to treat severe emphysema patients who, despite medical management, are still profoundly symptomatic and either do not want or are ineligible for surgical approaches. We estimate our solution currently addresses approximately 500,000 patients in the United States and 700,000 patients in select international markets, which represents a global market opportunity of approximately $12 billion.

We have a compelling body of clinical evidence with over 100 scientific articles published regarding the clinical benefits of Zephyr Valves, including in *The New England Journal of Medicine*, *The Lancet* and the *American Journal of Respiratory and Critical Care Medicine*. Multiple randomized controlled clinical trials have demonstrated that patients selected with the Chartis System and successfully treated with Zephyr Valves have shown statistically and clinically significant improvements in lung function, exercise capacity and quality of life compared to medical management alone.

In June 2018, we received pre-market approval (PMA) by the U.S. Food and Drug Administration (FDA) as a result of our breakthrough technology designation. The Zephyr Valve is now commercially available in more than 25 countries, with over 76,000 valves used to treat more than 19,000 patients through December 31, 2019. We have established reimbursement in major markets in North America, Europe and Asia Pacific and the Zephyr Valve has been included in treatment guidelines for COPD worldwide.

COPD refers to a group of lung diseases characterized by obstruction of airflow that interferes with normal breathing. In 2015, it affected approximately 175 million patients and was responsible for 3.2 million deaths globally. We estimate that there are approximately 8.5 million severe COPD patients in developed markets globally as of 2019. Of these approximately 8.5 million severe COPD patients, we estimate approximately 3.2 million have severe emphysema and approximately 5 million have severe chronic bronchitis. Of the approximately 3.2 million severe emphysema patients, we estimate that approximately 1.2 million may be eligible for treatment with Zephyr Valves, and an additional number may be able to be treated in the future with other technologies under development by us.

In the United States, COPD is the third leading cause of death and affected approximately 16 million Americans as of 2013. COPD is expected to be associated with approximately $49 billion in direct medical costs in 2020. Emphysema, a form of COPD, which accounts for approximately 25% of all COPD patients, is a debilitating and life-threatening disease that progressively destroys lung tissue, resulting in a diminishing ability to breathe and engage in the most basic daily activities, leading to a high mortality rate. The lung damage caused by emphysema is irreversible. As of 2018, approximately 3.8 million patients in the United States were diagnosed with emphysema, of which roughly 1.5 million have severe emphysema. Of these 1.5 million severe emphysema patients, we estimate that approximately 500,000 patients would qualify for treatment with our Zephyr Valves, and an additional number may be able to be treated in the future with other technologies under development by us if successfully developed and approved.



There are several treatment options for patients with emphysema, depending on the level of severity of the disease, ranging from medical management to more invasive surgical options. However, these treatment options have significant limitations for patients with severe emphysema.

Initial treatment for emphysema is generally limited to medications that primarily target airway obstruction and reduce inflammation, but do not address the underlying lung tissue destruction. As the disease worsens, symptoms increase despite optimized drug therapy, pulmonary rehabilitation exercises and supplemental oxygen.

As patients enter the severe phase, many become increasingly unable to engage in the most basic daily activities as a result of the persistent feeling of breathlessness and this reduces their overall health status each year. At this point, physicians may refer patients to thoracic surgeons for single or double lung transplantation or for lung volume reduction surgery (LVRS), in which hyperinflated tissue is cut away and removed. These invasive surgical procedures involve substantial risk of complications, prolonged hospital stays and high mortality. In addition, many patients do not qualify for these procedures. Patients with severe emphysema generally experience a worse quality of life than patients with lung cancer. We believe there is both an urgent clinical need and a strong market opportunity for a solution that is safe, effective and minimally invasive.

Our solution, which is comprised of the Zephyr Valve, Chartis System and StratX Platform, is designed to address the need for a more effective, minimally invasive treatment option for patients with severe emphysema, offering bronchoscopic lung volume reduction without surgery and its associated risks. Zephyr Valves are indicated for bronchoscopic treatment of adult patients with hyperinflation associated with severe emphysema in regions of the lung that have little to no collateral ventilation. During the one-time bronchoscopic procedure, Zephyr Valves are placed in the airways to occlude the most diseased parts of the lung, allowing trapped air to escape until the lobe is reduced in size. The intended result is a reduction in lung volume and hyperinflation in the targeted lobe, allowing healthier parts of the lung to expand and take in more air. Patients who are successfully treated with the Zephyr Valve report improved breathing and the ability to go back to doing everyday tasks more easily.

We believe our solution provides the following important benefits:

- **Significant, durable improvements in lung function, exercise capacity and quality of life**, demonstrated in a substantial body of clinical data;
- **Well-characterized safety profile**, evidenced by the inclusion in global treatment recommendations and more than 19,000 patients treated globally with the Zephyr Valve;
- **High procedural success** driven by innovative and effective patient assessment tools; and
- **Minimally invasive procedure** typically lasting less than an hour.

Over 100 scientific articles have been published regarding the clinical benefits of Zephyr Valves, including multiple meta-analyses, review articles, cost-effectiveness analyses and risk-benefit analyses. The Zephyr Valve showed statistically significant improvements in lung function, exercise capacity and quality of life when compared to medical management alone in multiple randomized controlled clinical trials. Additionally, independent studies have demonstrated that Zephyr Valves deliver increases in the BODE Index (a multi-dimensional health status scoring system for patients with COPD) that have been associated with survival benefits.

The LIBERATE study, our pivotal study published in 2018, was a multicenter, multinational, randomized controlled clinical trial of Zephyr Valves that included 190 patients with severe emphysema and little to no collateral ventilation. All primary and secondary endpoints were statistically significant, including the proportion of patients achieving a clinically significant improvement in lung function as well as the mean improvements in exercise capacity, hyperinflation and quality of life. These outcomes were the result of a high rate of procedural success, with 84% of patients achieving a clinically meaningful reduction in treated lobe volume.

We market and sell our products in the United States through a direct sales organization consisting of 32 sales territory managers as of December 31, 2019. Our sales territory managers are focused on promoting awareness and increasing adoption of our solution primarily among the approximately 800 pulmonologists performing interventional pulmonary procedures and across approximately 500 high volume hospitals in the United States. As of December 31, 2019, we had 26 sales territory managers outside the United States, with 18 in Europe and eight in Asia Pacific. We are expanding our commercial operations in the United States while continuing to foster our international growth. In international markets, we employ both direct and distributor-based sales models, with over 90% of our revenue generated in markets where we sell directly.

In the United States, our solution is reimbursed based on established Category I CPT and ICD-10 Procedure Coding System (PCS) codes and associated MS-DRG and APC payment groupings. Current reimbursement in the United States is generally sufficient to cover the hospital costs of the procedure and related inpatient care. As of December 31, 2019, commercial payors such as Aetna, Humana, Priority Health and Emblem Health have issued positive coverage policies for endobronchial valve procedures. United Healthcare removed the endobronchial valve codes from their non-covered list, and as such no longer considers the procedure unproven or experimental. Other commercial payors, such as many plans in the Blue Cross Blue Shield family of plans, do not yet consider our solution medically necessary, but these same plans are approving pre-authorization requests on a case-by-case basis. Medicare, currently without a public coverage policy, covers our solution for patients when medically necessary on a case-by-case basis and other commercial insurers not described above are approving pre-authorization requests on a case-by-case basis. Outside the United States, our solution is covered by major health systems across much of Europe, Australia and South Korea.

We generated revenue of $32.6 million, with a gross margin of 68.8% and a net loss of $20.7 million, for the year ended December 31, 2019 compared to revenue of $20.0 million, with a gross margin of 61.4% and a net loss of $18.5 million, for the year ended December 31, 2018. As of December 31, 2019, we had an accumulated deficit of $210.4 million. We currently generate most of our revenue from the sales of Zephyr Valves and delivery catheters. We also generate a smaller amount of our revenue from our Chartis System, which is comprised of sales of the balloon catheters, usage fees and sales of the Chartis console. The StratX Platform, while used to identify patients eligible for treatment with Zephyr Valves, does not independently generate any revenue for us.

Our Success Factors

We believe the continued growth of our company will be driven by the following success factors:

- ***Innovative, minimally invasive treatment paired with proprietary patient selection technology.*** We have developed the first FDA-approved implant, the Zephyr Valve, to reduce hyperinflation associated with severe emphysema, which received a breakthrough technology designation and pre-market approval. To enhance optimal outcomes with the Zephyr Valve, the Chartis System and the StratX Platform are designed to help physicians identify and treat those patients most likely to benefit from treatment with Zephyr Valves. We believe the combination of our innovative valve treatment and patient assessment tools

represents a significant competitive advantage and our goal is to establish our solution as a standard of care for severe emphysema.

- ***Addressing a large underserved market.*** We are addressing a large underserved market for patients with severe emphysema whose treatment options are limited. We believe our solution currently addresses approximately 500,000 patients in the United States and 700,000 patients in select international markets who have severe emphysema with hyperinflation and limited to no collateral ventilation, representing an approximately $12 billion global market opportunity. We have established significant momentum with our broad global commercial footprint across more than 25 countries and with a track record of more than 19,000 patients treated. Additionally, we have ongoing research and development efforts to further expand the addressable market of our products.

- ***Compelling body of clinical evidence and inclusion in COPD guidance documents.*** The safety, effectiveness and clinical advantages of Zephyr Valves have been demonstrated in multiple randomized controlled clinical trials. The quality of evidence for treatment with endobronchial valves has been graded “A” by the Global Initiative for Chronic Obstructive Lung Disease (GOLD), and the United Kingdom’s National Institute for Health and Care Excellence (NICE) has included this treatment as part of standard measures for COPD and recommended all qualifying patients be evaluated for eligibility. Treatment with endobronchial valves has been included in other national and international COPD guidance documents and evidence reviews, including organizations such as the German Respiratory Society (DGP), the Dutch National Health Care Institute (Zorginstituut Nederland), the Cochrane Library and the COPD Pocket Consultant Guide.

- ***Favorable coverage and established reimbursement.*** In the United States, our solution is reimbursed based on established Category I Current Procedural Terminology (CPT) and ICD-10 PCS codes and associated MS-DRG and APC payment groupings. Current reimbursement in the United States is generally sufficient to cover the hospital costs of the procedure and related inpatient care. As of December 31, 2019, commercial payors such as Aetna, Humana, Priority Health and Emblem Health have issued positive coverage policies for endobronchial valve procedures. United Healthcare removed the endobronchial valve codes from their non-covered list, and, as such, no longer considers the procedure unproven or experimental. Other commercial payors, such as many plans in the Blue Cross Blue Shield family of plans, do not yet consider our solution medically necessary, but these same plans are approving pre-authorization requests on a case-by-case basis. Medicare, currently without a public coverage policy, covers our solution for patients when medically necessary on a case-by-case basis. We estimate that roughly 75% of the potential Zephyr Valve patient population are Medicare/Medicaid beneficiaries, of which approximately 25% have managed Medicare/Medicaid and the remaining 50% have traditional Medicare/Medicaid. Approximately 25% of the potential Zephyr Valve patient population is under third-party commercial payor policies. We have a dedicated patient reimbursement support team designed to assist patients as they navigate the reimbursement process that works collaboratively with patients and providers to help secure the appropriate prior authorization approvals in advance of treatment. We continue to educate private insurers on our clinical data and patient selection tools to continue to expand the number of positive coverage policies. Outside the United States, our solution is covered by major health systems across much of Europe, Australia and South Korea.

- ***Comprehensive approach to market development and patient engagement.*** We have established a stepwise approach to market development across three key stakeholders in severe emphysema treatment: hospitals, physicians and patients. Our commercial organization is focused on working with pulmonary physicians and their hospitals to build emphysema centers of excellence where physicians are instructed in the workup of advanced COPD and perform bronchoscopic lung volume reduction using our solution. Our team works closely with all members of the hospital care team to help these centers efficiently incorporate our solution as a new service line. In addition, we are partnering with these centers to build awareness and referrals from primary care and other physicians who may be managing severe emphysema patients in the community. We build upon this approach with direct-to-patient marketing initiatives that help educate patients on the Zephyr Valve procedure and where it is available. We believe that this comprehensive

approach to engagement across multiple constituents will help to increase awareness of and demand for our solution.

- ***Robust intellectual property portfolio.*** We own intellectual property that covers the Zephyr Valve and Chartis System. As of December 31, 2019, we held 37 U.S. patents and 82 international patents that include device, apparatus and method claims. In addition, we believe that our trade secrets, including manufacturing know-how, provide additional barriers to entry.

Our Growth Strategy

Our vision is to be a global leader in treating advanced lung disease and to have a transformational impact on the lives of patients. Our goal is to establish our solutions as the standard of care for the assessment and treatment of patients with severe COPD.

Key elements of our strategy to achieve this vision include:

- ***Expanding our commercial organization in the United States to drive adoption of Zephyr Valves.*** As of December 31, 2019, we sold Zephyr Valves to more than 80 hospitals and had 32 sales territory managers in the United States. We plan to expand our commercial organization by recruiting and training talented sales territory managers in existing and new markets in the United States to help facilitate further adoption and broaden awareness of Zephyr Valves primarily among the approximately 800 pulmonologists performing interventional pulmonary procedures across approximately 500 high volume hospitals. We believe investing in a scalable, efficient direct sales force and continuing the development of our marketing efforts will help us broaden adoption of our solution and increase revenue growth.

- ***Collaborating with hospitals to address unmet patient needs.*** Our strategy is to identify regions with high unmet need, identify leading hospitals and work with champions of our solution to build emphysema centers of excellence. We believe there is a significant growth opportunity for hospitals to provide high quality comprehensive diagnosis and treatment for severe emphysema patients. We believe we can efficiently serve the United States market, focusing on approximately 500 high volume hospitals, of which we currently cover a small percentage.

- ***Promoting awareness among patients, physicians and other healthcare providers.*** We intend to continue to promote awareness of our solution through training and educating patients, physicians, pulmonary rehabilitation centers, key opinion leaders and various medical societies on the proven clinical benefits of Zephyr Valves. We also intend to continue helping physicians in their outreach to patients and other healthcare providers. In addition, we intend to continue to publish additional clinical data in various industry and scientific journals and online and to present at various industry conferences. We believe that many patients who suffer from severe emphysema are eager for a minimally invasive treatment option such as the Zephyr Valve. In a 2019 published study, we conducted a survey of 294 severe emphysema patients, of which 76.4% said they would choose a minimally invasive treatment option such as the Zephyr Valve over their existing treatment options. We also plan to continue building patient awareness through our direct-to-patient marketing initiatives, which include advertising, social media and online education. We also intend to continue helping physicians in their outreach to patients and other healthcare providers.

- ***Continuing to invest in research and development to foster innovation and expand our addressable market.*** Our commitment to improving patient lives fuels our desire to foster innovation through continuous research and product development. We intend to continue investing in existing and next generation technologies to further improve our products and clinical outcomes, enhance patient selection and broaden the patient population that can be treated with our products. We are in discussions with the FDA regarding the potential use of Zephyr Valves for the management of persistent air leaks (air leaks lasting five days or longer despite use of a chest tube). In addition, we are continuing to invest in the accuracy and features of our patient assessment tools. In the future, we also plan to conduct clinical

research of AeriSeal, a potential product in development for the treatment of severe emphysema patients who are not qualified for Zephyr Valve treatment due to collateral ventilation.

- ***Expanding in existing and new international markets.*** We have established a leading international sales force in interventional pulmonology. We intend to continue expanding our team and seeking additional international regulatory clearances in order to more fully penetrate this global opportunity. As of December 31, 2019, we had 26 sales territory managers outside the United States, with 18 in Europe and eight in Asia Pacific. Our goal is to further increase sales of the Zephyr Valves in existing international markets in Europe—including Austria, France, Germany, Italy, the Netherlands, Spain, Switzerland and the United Kingdom, deepen penetration in Australia, China and South Korea, and expand our reach to new markets, such as Japan. We plan to strategically invest in new markets based on our assessment of market size and opportunity and prospects for compelling reimbursement coding and coverage.

- ***Driving profitability by scaling our business operations to achieve cost and production efficiencies.*** We plan to drive profitability and gross margin expansion by leveraging our manufacturing capacity to scale production volume, improve efficiencies and lower costs as we increase supply to meet the anticipated growing demands for our products. In the future, our goal is to lower the cost of goods sold through productivity improvements, implementation of lean manufacturing and spreading the fixed costs over increased number of units as we grow the volume of products sold.

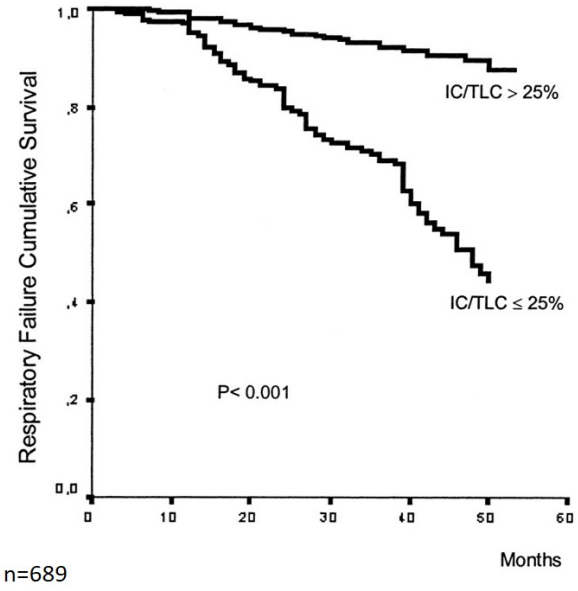
Our Market Opportunity

Overview of COPD and Emphysema

COPD refers to a group of lung diseases characterized by obstruction of airflow that interferes with normal breathing. Risk factors for COPD include smoking, environmental hazards, air pollution and genetics. In 2010, COPD accounted for approximately $30 billion in direct medical expense in the United States alone, and COPD is expected to be associated with approximately $49 billion in direct medical costs in 2020. COPD is the third leading cause of death in the United States, and one of the only major causes of death that continues to grow in developed countries. In 2015, 3.2 million people died from COPD worldwide, up almost 12% from 1990. In developed countries from 1990 to 2015, COPD-related deaths increased at a rate of almost 32%. The number of COPD patients continues to grow as Medicare estimates its number of COPD patients grew from 4.8 million in 2007 to 6.4 million in 2017.

Emphysema, a form of COPD, which accounts for approximately 25% of all COPD patients, is a debilitating and life-threatening disease that progressively destroys lung tissue, resulting in a diminishing ability to breathe and engage in the most basic daily activities, leading to a high mortality rate. The lung damage caused by emphysema is irreversible. In patients with emphysema, diseased portions of the lung lose their ability to exchange oxygen and carbon dioxide due to damage to the air sacs, or alveoli. The diseased portions of the lung also lose elasticity, become over-inflated, and crowd out the healthier lung tissue. As a result, patients with emphysema experience shortness of breath, gradually losing their ability to engage in the most basic daily activities such as climbing a flight of stairs, walking or showering. Based on published literature, the five-year mortality rate for patients with severe emphysema is approximately 50%.

The following graph shows an increased mortality rate for patients with more hyperinflation relative to patients with less hyperinflation.



The inspiratory capacity-to-total-lung capacity (IC/TLC) ratio is an indirect measurement of lung hyperinflation. The graph above depicts two Kaplan-Meier survival analyses of (1) patients with an IC/TLC ratio greater than 25% and (2) patients with an IC/TLC less than or equal to 25%.

Emphysema is diagnosed through a combination of breathing tests and computed tomography (CT) imaging of the lungs. The diagnosis is typically done by a radiologist or a pulmonologist. Emphysema severity is evaluated using a standardized test called spirometry as well as the degree of patient symptoms.

Current Treatments for Emphysema and Their Limitations

There are several treatment options for patients with emphysema, depending on the level of severity of the disease, ranging from medical management to surgery. However, these treatment alternatives have significant limitations and in some cases are highly invasive.

Initial treatment for emphysema is generally limited to prescribing inhaled medications such as drugs that open the airways and reduce inflammation, which primarily target airway obstruction. However, as the disease becomes more severe, the effectiveness of drug therapy is diminished, and patients feel increasingly breathless. As the disease progresses, physicians may prescribe pulmonary rehabilitation exercises and supplemental oxygen, but these can be poorly tolerated by patients and often lose effectiveness with time. As patients enter the severe phase, many become increasingly unable to engage in the most basic daily activities as a result of the persistent feeling of breathlessness and this reduces their overall health status each year. At this point, physicians may refer patients to thoracic surgeons for LVRS, in which hyperinflated tissue is cut away and removed, or for single or double lung transplantation.

LVRS is an invasive surgery that involves cutting away diseased tissue to create space for the remaining lung to more fully inflate. LVRS was studied extensively in the National Emphysema Treatment Trial (NETT), which showed that while a broad group of patients gained quality of life and exercise capacity from the surgery, it also involved substantial risks of complications, prolonged hospital stays and even death. As a result of the NETT study, use of LVRS was restricted by the Centers for Medicare & Medicaid Services (CMS) to a subgroup of patients and can only be offered at a limited number of highly specialized medical centers.

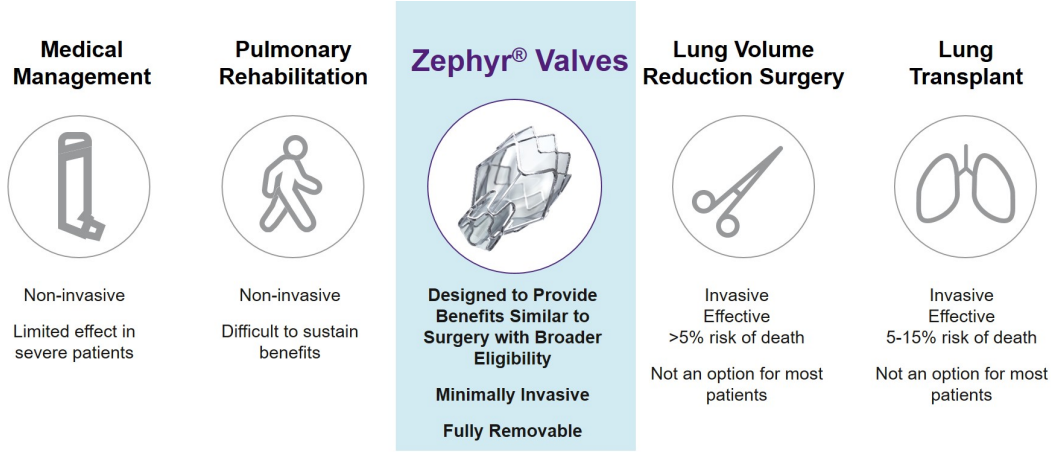
Lung transplantation involves surgically removing one or both lungs and replacing them with donor lungs. This procedure is highly time and resource intensive due to the complexity of the surgery. Even with a successful procedure and consistent use of anti-rejection medications, lung transplantation patients have a five-year survival rate on average. Due to these limitations, and constraints from limited donor supply, LVRS and lung transplantation combined have fewer than 2,000 procedures performed for COPD each year in the United States.

In addition to recently approved endobronchial valves, there are other approaches to a minimally invasive alternatives to LVRS, including the use of airway bypass, coils and vapor. However, to date, only endobronchial valves have demonstrated safety and effectiveness in FDA-approved investigational device exemption (IDE) studies in the United States.

Our Solution

Our solution, which is comprised of the Zephyr Valve, Chartis System and StratX Platform, is designed to treat severe emphysema patients who, despite medical management, are still profoundly symptomatic and either do not want or are ineligible for surgical approaches. Our solution is designed to address the need for a more effective, minimally invasive treatment option for patients with severe emphysema, offering bronchoscopic lung volume reduction without surgery and its associated risks.

Zephyr Valves are indicated for bronchoscopic treatment of adult patients with hyperinflation associated with severe emphysema in regions of the lung that have little to no collateral ventilation. During the one-time bronchoscopic procedure, Zephyr Valves are placed in the airways to occlude the most diseased parts of the lung, allowing trapped air to escape until the lobe is reduced in size. The intended result is a reduction in lung volume and hyperinflation in the targeted area, allowing healthier parts of the lung to expand and take in more air. Patients who are successfully treated with the Zephyr Valve report improved breathing and the ability to go back to doing everyday tasks more easily. When combined with the Chartis System for informed patient selection and treatment planning, Zephyr Valves have been shown to have successful procedure rates of 84-90% in clinical trials.



We believe our solution provides the following important benefits:

- **Significant, durable improvements in lung function, exercise capacity and quality of life**, demonstrated in a substantial body of clinical data;
- **Well-characterized safety profile**, evidenced by the inclusion in global treatment recommendations and over 19,000 patients treated globally with Zephyr Valve;
- **High procedural success** driven by innovative and effective patient assessment tools; and

- **Minimally invasive procedure** typically lasting less than an hour.

In addition, we believe our solution provides several benefits to other key stakeholders:

- For hospitals, the Zephyr Valve represents a new service line with potential economic benefits, driving additional patients to their facilities. Patients who are evaluated require a comprehensive workup that may unveil other health conditions such as heart disease or cancer, which also may require treatment.

- For physicians, the Zephyr Valve enables treatment for a patient population with few alternatives, and the combination of using the StratX Platform and Chartis System are designed to enable a simple, predictable and efficient patient selection process.

- For payors, treatment with the Zephyr Valve has been demonstrated to result in fewer complications and quicker recovery than invasive surgical alternatives and may reduce hospital stays for COPD and incidence of respiratory failure. We believe the combination of using the StratX Platform and Chartis System enables selection and treatment of patients most likely to benefit from our solution.

Treatment with Zephyr Valves

Patient Selection and Treatment Planning

Patients with advanced COPD routinely undergo a thorough diagnostic workup, which typically includes a high-resolution CT scan of their lungs to determine if they have severe emphysema and hyperinflation. If the patient meets medical eligibility criteria for Zephyr Valves, their CT scan data will be uploaded to our secure cloud-based CT analysis service, the StratX Platform. The treating physician receives an easy-to-read report that we designed for our solution (StratX Lung Report) and based on the report, CT scan and other clinical data, decides if the patient is a good candidate for treatment with Zephyr Valves and which lobes may be the best target for treatment. On the day of the procedure, a flexible camera called a bronchoscope is inserted into the lungs, and using the balloon catheter and console comprising the Chartis System, the physician can determine the presence or absence of collateral ventilation and confirm if the target lobe is likely to respond to treatment. If the assessment shows that there is little to no collateral ventilation to the target lobe (which would refill the lobe with air and limit benefit from the valves), the physician then proceeds to place Zephyr Valves in all airways leading to the target lobe. If there is collateral ventilation in the lobe, the physician may measure another lobe for possible treatment, or decide not to treat the patient with valves.

Placement of the Zephyr Valves

The Zephyr Valve is typically implanted under general anesthesia or conscious sedation. Using our Endobronchial Delivery Catheter (EDC) in a simple, one-step process, physicians select the optimal valve size for each airway. The valves are loaded into the delivery catheter and deployed through the bronchoscope using a controlled release mechanism to enable optimal placement. We offer four valve sizes to accommodate a broad range of airway anatomy that physicians may encounter. Following placement of valves, the patient is kept in the hospital, typically for three nights, to monitor for any side effects including pneumothorax. If a patient develops a pneumothorax, their hospital stay is typically extended by a week.

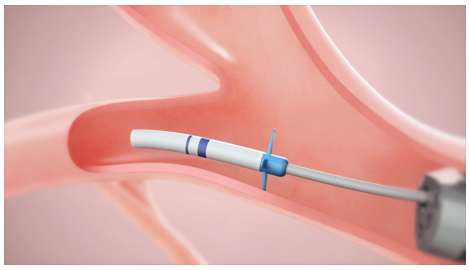
Zephyr Valves

Each of the Zephyr Valves consists of a one-way silicone duckbill valve suspended inside a self-expanding frame made of shape-memory metal, called Nitinol. The Zephyr Valve is designed to be easily and accurately sized and offers controlled and accurate deployment at the target location. The Zephyr Valve is also designed to resist fractures or breakage, adapt to changes in airway size and stay in place following deployment.

The following diagram depicts the four sizes of Zephyr Valves (two different diameters and four lengths).

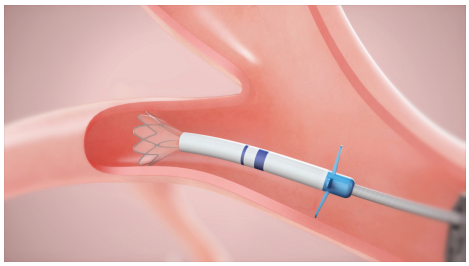
4.0-LP EBV **4.0 EBV** **5.5-LP EBV** **5.5 EBV**

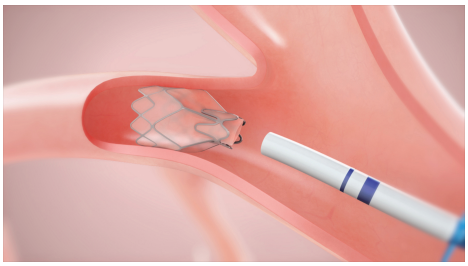
Physicians select the optimal valve size for each airway to be treated using an EDC that includes sizing wings and depth markers, which allows the physician to perform quick and accurate sizing.

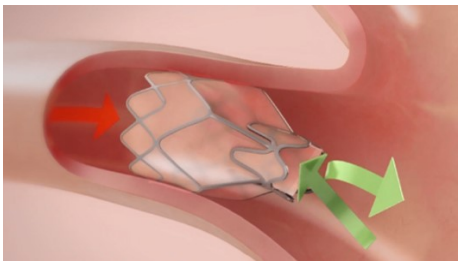


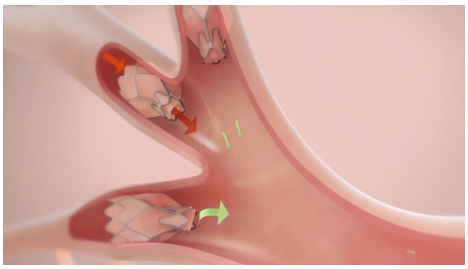
The Zephyr Valve is then loaded into the EDC.

Zephyr Valves offer a controlled, stepwise deployment for easy and accurate placement in the target airway. Once deployed, the valve is held in place by the radial expansion force of the housing. Typically, multiple valves are used to obstruct all airways leading to the target lobe; in clinical studies, an average of four valves per patient were used.









Once the lobe is fully obstructed, air vents out of the treated lobe and is unable to re-enter, causing a reduction in hyperinflation. The treated lobe shrinks in volume over time, allowing the remaining portions of the lung to expand and to restore diaphragm position, making breathing easier.

The Zephyr Valve is designed to be a permanent implant, but unlike surgery, the procedure can be reversed if necessary.

The most common serious complications of treatment with Zephyr Valves can include pneumothorax, worsening of COPD symptoms, hemoptysis, pneumonia, dyspnea, respiratory failure and, in rare cases, death. See “Clinical Trials and Results” for a discussion of complications related to Zephyr Valve, including pneumothoraces and death.

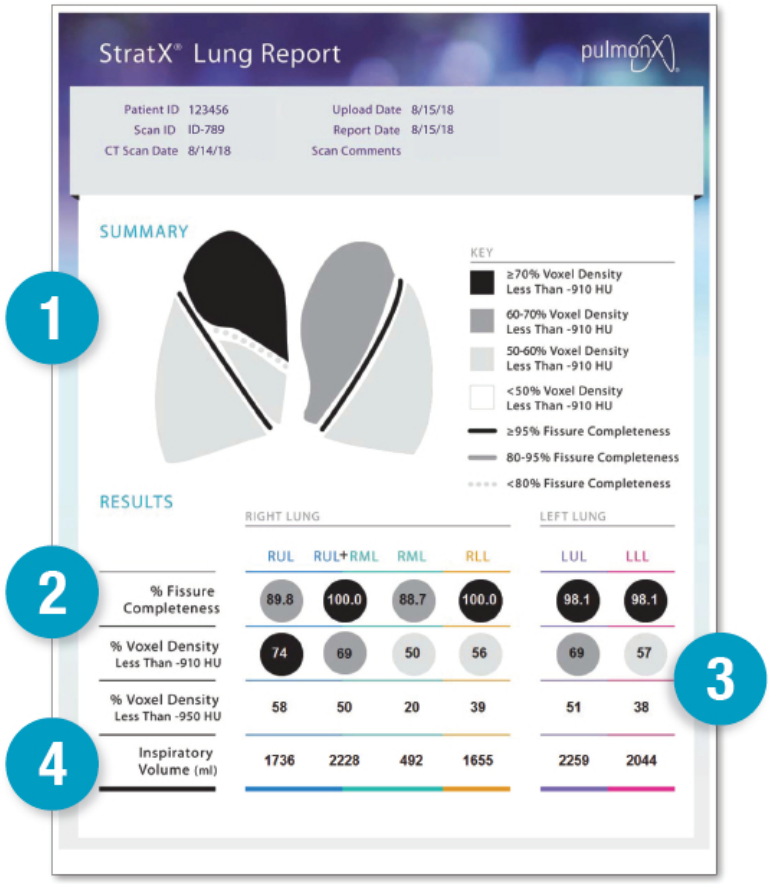
StratX Platform

The StratX Platform is a cloud-based quantitative CT analysis service that provides physicians with an easy-to-read report that we designed for our solution (StratX Lung Report) that includes information on emphysema destruction, fissure completeness and lobar volume to help identify target lobes for treatment with Zephyr Valves. The StratX Platform is designed to enable physicians to:

- Screen treatment candidates non-invasively;
- Prioritize between multiple potential treatment targets, if applicable;
- Enhance case planning and optimize procedure time; and
- Educate themselves and their patients using the simple to read StratX Lung Report.

In order to make the StratX Platform available to physicians, we contract with a third-party cloud service provider. This third-party cloud service enables physicians to upload CT scan data while removing protected health information (PHI) of patients from that data, in case the physicians have, inadvertently, not removed the PHI themselves. We also contract with additional third-party service providers to analyze the CT scan data using their proprietary software, and provide quantitative results via the StratX Lung Report. The StratX Lung Report is then made available to physicians in the third-party cloud service. The software of each of these third-party service providers has received either 510(k) approval or a CE mark. We provide exclusive access to physicians to their StratX accounts and cases and monitor this CT scan upload and analysis process to ensure quality control.

A sample StratX Lung Report is below, with each section briefly described afterwards.



1. **Summary Graphic:** The goal of the Zephyr Valve treatment is to completely obstruct and reduce the volume of a target lobe, thereby reducing hyperinflation and improving breathing. In selecting a target lobe, physicians are instructed to look for higher levels of emphysema destruction and presence of complete or nearly complete fissures with neighboring lobes (which has been associated with absence of collateral ventilation and likely response to therapy). The StratX Lung Report contains tabulated data on fissure completeness by lobe, destruction score by lobe and lobar volume. An infographic "key" for easy interpretation of the data is also included. This infographic includes color coding representing the level of emphysema destruction (with darker colors representing lobes with more destruction) and different levels of fissure completeness relative to a target lobe (with darker and more complete lines having greater completeness).

2. **Fissure Completeness:** Fissure completeness has been shown to be a predictor of success and a surrogate for collateral ventilation between the target and the neighboring lobes. The StratX Lung Report displays fissure completeness values "by lobe," meaning the values are computed as a percentage of the total area of the fissure across the lobar boundary. The value of fissure completeness between each lobar region is represented with a dark solid, light solid or dotted line. The dark solid line represents fissures that are ≥95% intact. The light solid line represents fissures that are 80-95% intact. The dotted line represents fissures that are <80% intact. A fissure completeness score of <80% indicates the likely presence of collateral ventilation in that lobe, indicating that the lobe should not be considered for treatment with Zephyr Valves.

For fissure completeness values of >80%, fissure completeness should be confirmed using the Chartis System to confirm lobe eligibility.

3. **Emphysema Destruction Scoring:** Lobar destruction values of greater than 50% at -910 Hounsfield Units (a measure of tissue density) have been commonly used as an inclusion criterion for various clinical trials of Zephyr Valve treatment. The StratX Lung Report also includes lobar destruction values using -950 Hounsfield Units. In the report and summary view, the degree of shading of a lobe and the numbers within the lobe represent the level of destruction. Lobes with less than 50% destruction are colored white and are usually not considered as potential targets for Zephyr Valve treatment.

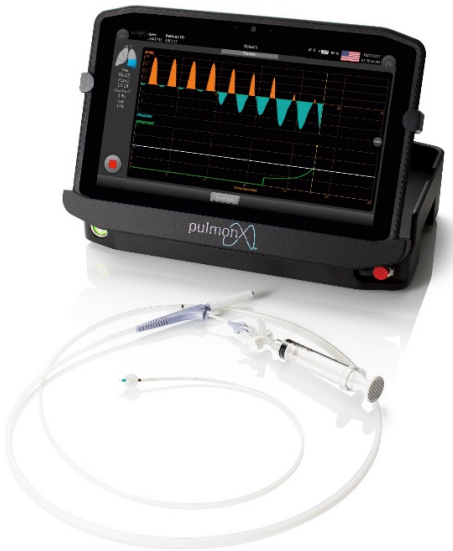
4. **Inspiratory Volume:** The inspiratory volume represents the volume of each lobe in mL. The inspiratory volume can help to identify the lobes with the largest volume representing hyperinflation and ones that may be a good target for Zephyr Valve treatment.

To use the StratX Platform, users must have an account set up with us. After the physician captures a CT scan of the patient's chest according to the StratX parameters, the CT scan is de-identified of patient information and the hospital staff uploads the CT scan to our secure encrypted server where it is analyzed using validated algorithms within the StratX Platform. The StratX Platform generates a report that is checked by a trained technician for accuracy and completeness and uploaded to the hospital's account within two to three working days, where it can be downloaded and reviewed by the treating physician.

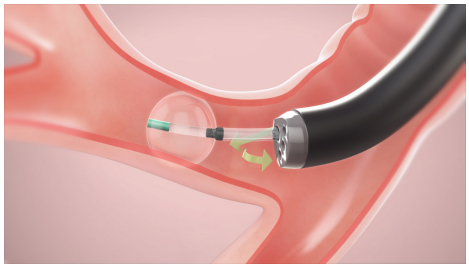
We continue to gather scan data and refine our algorithms in the StratX Platform. We believe that our high volume of reports and data are a source of durable competitive advantage.

Chartis Pulmonary Assessment System

The Chartis System is a proprietary balloon catheter and console system with flow and pressure sensors designed to assess the presence of collateral ventilation and to accurately predict responders to Zephyr Valve treatment. The Chartis System consists of a single-patient-use catheter with a central lumen and a balloon at its tip and a console to allow for the assessment of airflow in the targeted lobe.

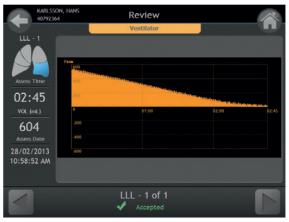


When the balloon is inflated, the target lobe is blocked, and air can only escape through the catheter's central lumen.



Airflow and pressure are displayed on the console of the Chartis System allowing for a measurement of collateral ventilation in the targeted lobe. The system works with spontaneous breathing or mechanical ventilation. If the flow of air leaving the occluded lobe is trending towards zero, there is likely no collateral ventilation in the target lobe and it can be successfully treated with Zephyr Valves. By contrast, if the measurement shows continuous airflow from the lobe, the lobe is being refilled through collateral air channels and will likely not respond to Zephyr Valve treatment.

CV-



CV+

The Chartis System has been validated in multiple randomized controlled clinical trials to predict likely responders to the Zephyr Valve treatment.

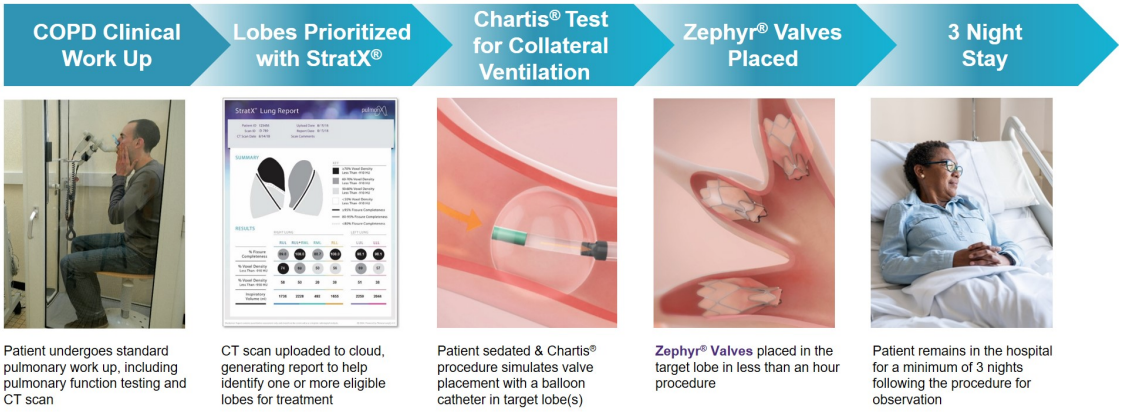
The Chartis System offers a physiologic technique for measuring collateral ventilation and complements non-invasive estimates of fissure completeness. Other methods, such as using fissure analysis as a proxy measurement of collateral ventilation allows detection of an incomplete boundary between the lobes but does not measure how much air is flowing across this gap. Without assessment by the Chartis System, physicians may treat a lobe that has collateral ventilation, which will likely not respond to valve treatment, or unnecessarily rule out a patient who could have potentially benefitted from valve treatment.

For example, in one early study not sponsored by us that treated patients with a broad range of fissure completeness, approximately 60% of patients who had fissure completeness of 80-90% in the treated lobe had a successful procedure. If a physician was using only quantitative computed tomography (QCT) and a 90% fissure completeness cutoff to select patients, the physician would inappropriately screen out patients in the 80-90% completeness range that could benefit from valve treatment. In that same study, only 72% of patients with a fissure completeness of

90-100% had successful volume reduction in the target lobe. By comparison, patients selected using the Chartis System in four randomized controlled clinical trials had a success rate of 84%, 88%, 89% and 90%. Thus, while quantitative fissure analysis is an important tool for non-invasively screening out ineligible lobes, we believe it is insufficient for identifying responders to treatment with high accuracy.

Treatment Steps

The following graphic illustrates the typical treatment steps associated with our solution.



Pulmonx Market Opportunity

According to the National Center for Health Statistics, as of 2018, 3.8 million people in the United States have been diagnosed with emphysema and we estimate a 10% incidence rate per year; of these, 1.5 million suffer from severe emphysema and 1.2 million also have associated hyperinflation. An estimated 20% of these patients are too sick to undergo a procedure and approximately 50% have collateral ventilation in the lobe targeted for treatment and therefore are not eligible. Of these 1.5 million severe emphysema patients, we estimate that approximately 500,000 patients would qualify for treatment with our Zephyr Valves in the United States, and an additional number may be able to be treated in the future with other technologies under development by us if successfully developed and approved. We also estimate there are approximately 700,000 Zephyr Valve-eligible patients in select international markets. We estimate this represents a global market opportunity of approximately $12 billion.

Clinical Trials and Results

The safety, effectiveness and clinical benefits of the Zephyr Valve in patients selected using the Chartis System have been evaluated in multiple randomized controlled clinical trials that have collectively evaluated approximately 450 patients in Austria, Belgium, Brazil, France, Germany, the Netherlands, Sweden, the United Kingdom and the United States. The results of our LIBERATE study, which served as the basis for the FDA approval of our PMA application, were published in the *American Journal of Respiratory and Critical Care Medicine* in 2018 and met all its primary and secondary effectiveness endpoints. In addition, over 100 scientific articles have been published on the clinical benefits of Zephyr Valves, including multiple meta-analyses, review articles, cost-effectiveness analyses and risk-benefit analyses.

Four randomized controlled clinical trials using the Chartis System to select eligible patients (with little to no collateral ventilation) have been completed comparing the treatment of severe emphysema patients with Zephyr Valves with medical management versus medical management alone (which may include drug therapy, pulmonary rehabilitation and supplemental oxygen). All four studies demonstrated statistically and clinically significant benefits across a broad range of endpoints, including measures of lung function, exercise capacity, and quality of life.

Patients who received the Zephyr Valve treatment together with medical management experienced increased lung function, a better quality of life and increased exercise capacity—they could walk farther, could do more daily life activities, such as walking, gardening, and getting ready in the morning, with less shortness of breath. This was due in part to the high rate of procedural success in deflating the target lobe of the lung, ranging from 84-90% in the studies. When the target lobe was properly occluded and isolated from airflow, trapped air in that lobe escaped only through the Zephyr Valves until the lobe volume was reduced. The remaining lobes were then able to expand more fully and work more efficiently, improving overall lung function. Additionally, studies have evaluated the impact of Zephyr Valves on the BODE Index, showing magnitudes of improvement that have been associated with survival benefits.

We are following patients enrolled in the LIBERATE study for up to five years for safety and effectiveness (FEV_1) assessments. We have also established a patient registry to collect additional data on the safety and effectiveness of the Zephyr Valve (FEV_1) in the United States. We plan to establish similar registries in France and Belgium in the near future.

Summary of Key Clinical Results

As seen in the table below, the results from multiple randomized clinical trials have consistently shown statistically significant and clinically meaningful benefits of Zephyr Valves across multiple measures of effectiveness.

			Improvement in:		
Randomized Controlled Clinical Trials	**Size and Follow-up Period**	**Procedural Success** (TLVR %)	**Lung Function** (FEV_1%) ⊤ MCID = 10%-15%	**Exercise Capacity** (6MWD) ⊤ MCID = 26 m	**Quality of Life** (SGRQ) ⊤ MCID = -4 pts
LIBERATE	n = 190 12 Mo	84%	18.0% p<0.001	39 m p=0.002	-7.1 pts p=0.004
TRANSFORM	n = 97 6 Mo	90%	29.3 % p<0.001	79 m p<0.001	-6.5 pts p=0.031
IMPACT	n = 93 6 Mo	89%	16.3 % p<0.001**	28 m p=0.016**	-7.5 pts p<0.001**
STELVIO	n = 68 6 Mo	88%	17.8 % P=0.001	74 m p<0.001	-14.7 pts* P<0.001

⊤ Difference between Zephyr Valve and control groups
* Per protocol, all other values listed are intention to treat (ITT)
** Data included in FDA-approved instructions for use (IFU)

The complications of treatment with Zephyr Valves can include but are not limited to pneumothorax, worsening of COPD symptoms, hemoptysis, pneumonia, dyspnea and, in rare cases, death. The most common side effect of Zephyr Valve placement is a pneumothorax, which is the collapse of a lung due to an air leak inside the lung. Pneumothoraces are believed to be a direct result of rapid shifts in air volume in the chest as the target lobe deflates and the neighboring lobe expands. A pneumothorax typically requires placement of a chest tube to manage the air leak. While most pneumothoraces can be readily managed with standard medical care, in rare cases they can be life-threatening, particularly if left untreated. In the event the pneumothorax does not resolve with standard management, one or more valves can be removed to re-inflate the lung; these are typically replaced later when the pneumothorax has resolved. In clinical trials, pneumothoraces occurred in 18-34% of patients treated with the Zephyr Valve, and in the LIBERATE Study, 17% of the pneumothorax events required no intervention and resolved on their own. Patients who have had their pneumothoraces successfully treated had comparable outcomes to those who did not experience a pneumothorax, other than that their hospital stays were extended by approximately a week compared to the three nights for patients without pneumothoraces.

Further, our current products are contraindicated, and therefore should not be used, in certain patients, including patients (i) for whom bronchoscopic procedures are contraindicated, (ii) with evidence of active pulmonary

infection, (iii) with known allergies to Nitinol (nickel-titanium) or its constituent metals (nickel or titanium) or silicone, (iv) who have not quit smoking or (v) with large bullae encompassing greater than 30% of either lung.

Summary of the LIBERATE Study (Pivotal IDE Study)

LIBERATE, our pivotal study, was a multicenter, multinational, randomized controlled trial of Zephyr Valves in patients with heterogeneous emphysema and little to no collateral ventilation. The study was conducted between October 2013 and September 2017, and the results were published in May 2018 in the *American Journal of Respiratory and Critical Care Medicine.*

Key inclusion criteria were emphysema patients with heterogeneous disease (≥15 difference in destruction scores between the target and adjacent lobes), ex-smokers between 40 and 75 years of age, with post-bronchodilator (BD) forced expiratory volume in one second (FEV_1) between 15% and 45% predicted, Total Lung Capacity (TLC) greater than 100% predicted, residual volume (RV) equal to or greater than 175% predicted, diffuse capacity of the lung for carbon monoxide equal to or greater than 20% predicted, a Six-Minute Walk Distance (6MWD) between 100 and 500 meters after a supervised pulmonary rehabilitation program and little to no collateral ventilation. Patients with two or more COPD exacerbations requiring hospitalization in the last year, two or more instances of pneumonia in the last year, uncontrolled pulmonary hypertension, myocardial infarction or congestive heart failure in prior six months, and prior lung transplantation, LVRS, bullectomy or lobectomy were excluded from the study.

The Chartis System was used to confirm that all 190 patients had little to no collateral ventilation and would be likely responders to the Zephyr Valve treatment, and were evaluated initially at six months with follow-up for an additional six months.

One hundred ninety patients with hyperinflation were randomized two-to-one for Zephyr Valves plus medical management (Zephyr Valve Group) or medical management alone (which may include drug therapy, pulmonary rehabilitation and supplemental oxygen) (Control Group) (128 Zephyr Valves patients: 62 Control Group patients) and followed for 12 months. Patients in the Zephyr Valve Group had Zephyr Valves placed in the target lobe to achieve lobar occlusion. Both the Zephyr Valve Group and Control Group patients continued to receive optimal medical management according to current clinical practice. Following their 12-month evaluation, the Control Group patients had an option to receive Zephyr Valve treatment, of which 47 out of 59 (80%) elected to do so. The LIBERATE study had high patient retention with 94% of patients completing follow-up for evaluation for 12 months.

The primary effectiveness endpoint was the percentage of patients enrolled in the Zephyr Valve Group who met the threshold of ≥15% improved FEV_1 as compared to the Control Group at 12 months.

The secondary effectiveness endpoints included standard validated assessments commonly used in COPD studies:

1) FEV_1, a measure of lung function: Difference between the Zephyr Valve Group and the Control Group in absolute change from baseline for FEV_1 at 12 months;

2) 6MWD, a measure of exercise capacity: Difference between the Zephyr Valve Group and Control Group in absolute change from baseline for 6MWD at 12 months; and

3) St. George’s Respiratory Questionnaire (SGRQ), a measure of quality of life: Difference between the Zephyr Valve Group and Control Group in absolute change from baseline for SGRQ score at 12 months.

Other endpoints included additional measures of lung function, exercise capacity, breathlessness and quality of life. Adverse events and serious adverse events were evaluated for the Treatment Period (day of procedure to 45 days), and Long-Term Period (46 days after procedure to 12 months) to assess safety.

Results

Effectiveness

The study met its primary and secondary endpoints at 12 months.

In the Zephyr Valve Group, 47.7% of patients achieved an FEV_1 improvement of ≥15% from baseline to 12 months compared to 16.8% of patients in the Control Group (p<0.001).

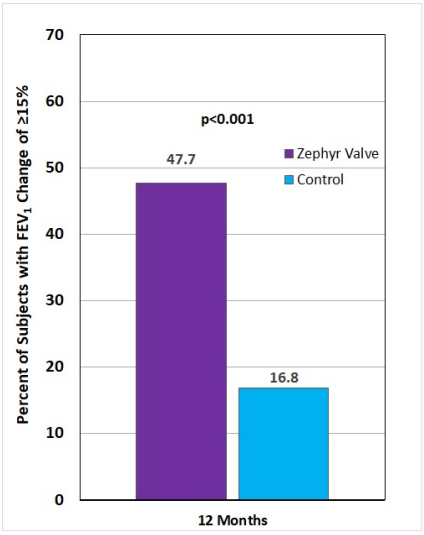
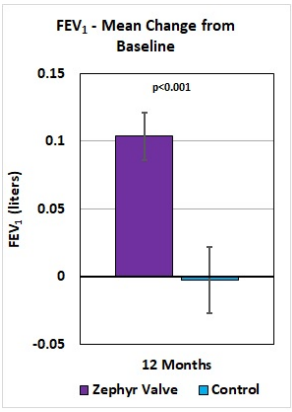
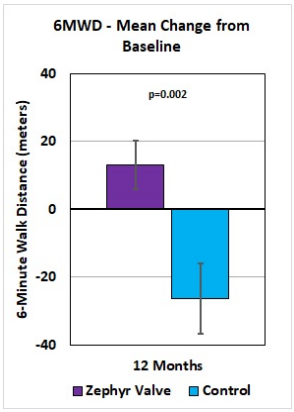


Figure shows the primary endpoint of FEV_1 Responders (FEV_1 improvement of ≥15%) at 12 months

The absolute change in FEV_1 showed significantly greater mean improvement (improved forced expiratory volume) in the Zephyr Valve Group compared to the Control Group (Δ Zephyr Valve - Control = +0.106L, p<0.001); the 6MWD showed significantly greater mean improvement (increased distance walked) in the Zephyr Valve Group compared to the Control Group (Δ Zephyr Valve - Control = +39.31 meters, p=0.002), and the SGRQ showed significantly greater mean improvement (score reduction) in the Zephyr Valve Group compared to the Control Group (Δ Zephyr Valve - Control = −7.05, p=0.004).





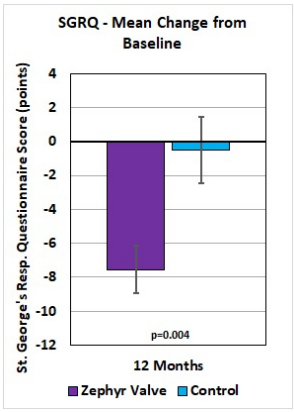


Figure above presents secondary endpoints as mean changes ± standard error of the mean (SEM) from baseline to 12 months for the Zephyr Valve and Control Groups

Target lobe volume reduction was successfully achieved with 84% of patients having volume reductions of 350 mL or greater, where 350 mL lobe volume reduction is considered to be the Minimal Clinically Important Difference (MCID). Across a broad range of effectiveness endpoints, patients in the Zephyr Valve Group showed a substantially higher rate of clinically meaningful benefits when compared to patients in the Control Group, with responder rates ranging from 42-62% for individual measures.

73% of patients in the Zephyr Valve Group had a clinically meaningful response to at least one of FEV_1, 6MWD and SGRQ score. Responder rates based on the individual MCID for the various endpoints at 12 months are shown in the figure below.

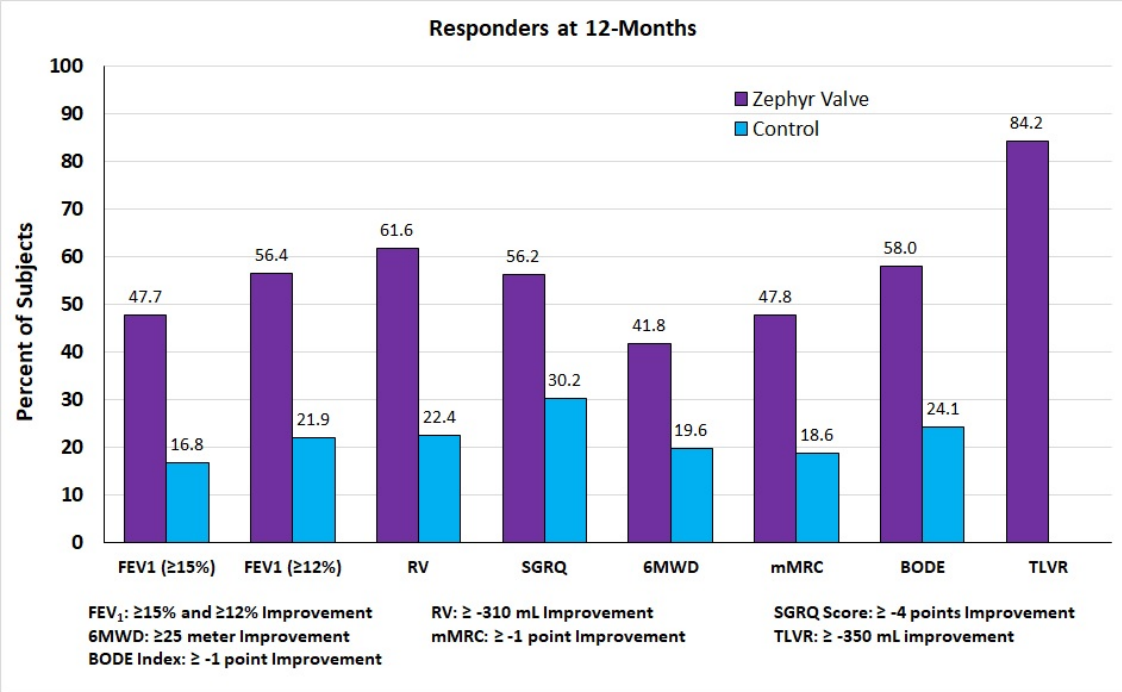


Figure above shows Responder rates based on individual MCID for various endpoints at 12 months

Safety

The safety of the treatment with Zephyr Valves was assessed by comparing adverse event profiles of patients in the Zephyr Valve Group and Control Group occurring over two time periods: Treatment Period (day of procedure to 45 days) and the Longer-Term Period (46 days after procedure to 12 months). Serious adverse events included pneumothorax, COPD exacerbation, pneumonia, respiratory failure and death.

Proportion of Patients Experiencing Pulmonary Serious Adverse Events Occurring in at Least 3% of Patients in Zephyr Valve and Control Groups

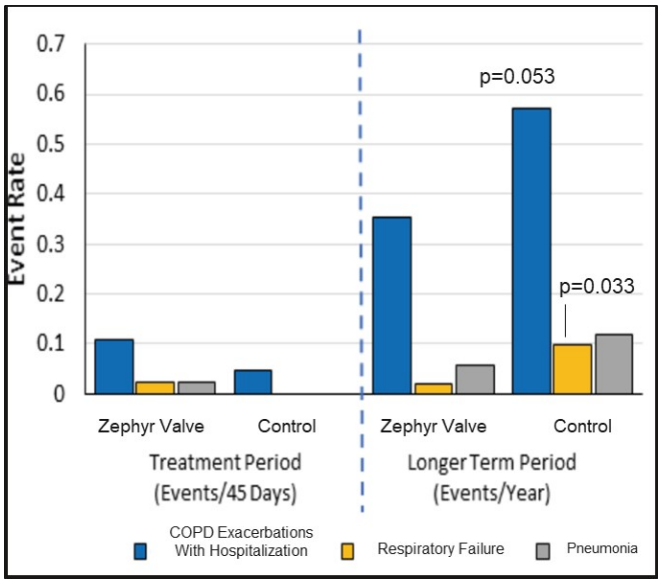
	Treatment Period 0 to 45 days			Longer-Term Period 46 days to 12 months		
	Zephyr Valve Group N=128	Control Group N=62	Δ Zephyr Valve - Control	Zephyr Valve N=128	Control N=62	Δ Zephyr Valve - Control
Death	3.1%	0%	3.1%	0.8%	1.6%	-0.8%
Pneumothorax	26.6%	0%	26.6%	6.6%	0%	6.6%
COPD Exacerbation	7.8%	4.8%	3.0%	23.0%	30.6%	-7.6%
Pneumonia	0.8%	0%	0.8%	5.7%	8.1%	-2.4%
Respiratory Failure	1.6%	0%	1.6%	0.8%	3.2%	-2.4%

There were a higher number of serious adverse events in the Zephyr Valve Group compared to the Control Group during the Treatment Period. The most common serious adverse events in the Zephyr Valve Group versus the Control Group during the Treatment Period were pneumothorax and COPD exacerbations.

The majority of pneumothoraces (76%) occurred within three days following a bronchoscopy procedure. Four deaths occurred in the Treatment Period in the Zephyr Valve Group and none in the Control Group. Three of the four deaths were deemed by the investigators to be definitely related to treatment with Zephyr Valves and the remaining one was deemed by the investigators to be probably related to treatment with Zephyr Valves. Each patient that died experienced pneumothorax, with three deaths directly attributed to the pneumothorax and the fourth death the result of respiratory failure after the pneumothorax had resolved. In order to more closely monitor patients, the study protocol was subsequently amended to keep patients in the hospital for five nights. Based on the full study data, current practice is to keep patients in hospital for a minimum of three nights post-treatment. Post-hoc analysis has helped us identify risk factors for the group of patients at higher risk of having a complex pneumothorax event (complex pneumothorax defined as requiring removal of all valves or resulting in death) should one occur. Such high-risk patients include those who are not treated in the most diseased lobe and have greater than 60% destruction of the untreated lung. All four patients who experienced a pneumothorax and died were within this high-risk group. Further, all four pneumothorax events occurred in subjects that were not treated in the most diseased lobe and had more than 60% emphysema destruction in the contralateral lung. This learning is incorporated in our physician training program for physicians to identify such high-risk patients and to consider alternative targets or other risk mitigation strategies. During the Longer-Term Period, there was one death (0.8%) in the Zephyr Valve Group from a COPD exacerbation, deemed by the investigators not to be related to treatment with Zephyr Valves, and one cardiac arrhythmia death in the Control Group (1.6%).

Patients who experienced a pneumothorax following treatment with Zephyr Valves and whose pneumothorax had been resolved, experienced meaningful clinical benefit once they recovered from the pneumothorax event, with benefits comparable to patients who did not experience such pneumothorax events.

In the Longer-Term Period, the Zephyr Valve Group showed a non-statistically meaningful trend towards a reduction in COPD exacerbations requiring hospitalization and statistically significant reductions in respiratory failure events.



There were a number of secondary bronchoscopy procedures (consistent with study protocol) either to adjust a valve or to manage adverse events. There were 11 adjustment procedures in 11 patients following verification of lobar occlusion from the HRCT-assessment at 45-days. There were 21 procedures purely for valve removal (related to an adverse event) in 17 patients, and ten valve replacement procedures in eight patients (valve replacement procedures could entail simultaneous removal and replacement, or replacement for a valve previously removed). Five patients experienced a pneumothorax event following a valve adjustment procedure. See also "Risk Factors — Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations."

Summary of the TRANSFORM Study

The TRANSFORM study was a company-sponsored, multicenter, prospective, randomized, controlled clinical trial of Zephyr Valve treatment in patients with heterogeneous severe emphysema and little to no collateral ventilation conducted at 17 study sites in Europe. The study was conducted between January 2014 and April 2017, and the results were published in September 2017 in the *American Journal of Respiratory and Critical Care Medicine.*

Key inclusion criteria were severe emphysema patients with heterogeneous disease (≥10 difference in destruction scores between the target and adjacent lobes), ex-smokers over 40 years of age, with post- BD FEV_1 between 15% and 45% predicted, TLC greater than 100% predicted, RV equal to or greater than 180% predicted, and a 6MWD between 100 and 450 meters and little to no collateral ventilation. Patients with two or more COPD exacerbations requiring hospitalization in the last year, known pulmonary hypertension, myocardial infarction or other cardiovascular events in prior six months, and prior lung transplantation, LVRS, bullectomy or lobectomy were excluded from the study. Eligible patients were randomly assigned at a 2:1 ratio into either the Zephyr Valve treatment plus medical management (Zephyr Valve Group) or medical management alone (which may include drug therapy, pulmonary rehabilitation and supplemental oxygen) (Control Group) (65 Zephyr Valve patients: 32 Control Group patients).

The Chartis System was used to confirm that all 97 patients had little to no collateral ventilation and would be likely responders to the Zephyr Valve treatment, and were evaluated initially at six months with follow-up for an additional six months.

Patients in both groups were observed at 45-day, three-month and six-month periods. Patients in the Control Group were required to complete a minimum six-month follow-up. Following their six-month evaluation, the Control Group patients had an option to receive Zephyr Valve treatment, if eligible, which is commercially available in Europe, or remain in the Control Group for an additional six months. Only two Control Group patients elected to continue for an additional six months and the other patients opted to seek Zephyr Valve treatment commercially.

The primary effectiveness endpoint was the percentage of patients in the Zephyr Valve Group meeting the MCID of ≥12% improved post- BD FEV_1 at three months post-treatment compared to the percentage of patients in the Control Group.

Other endpoints included additional measures of lung function, exercise capacity, breathlessness, hyperinflation, health status and quality of life measures. Adverse events and serious adverse events were evaluated for the Treatment Period (day of procedure to 45 days) and Longer-Term Period (46 days from procedure day to six months).

Results

Effectiveness

The study met its primary and secondary endpoints at three months.

At three months, 55% of patients on an ITT basis and 67% of patients on a per protocol (PP) basis achieved a ≥12% change in FEV_1 from baseline, compared to 6.5% for the ITT and 6.7% for the PP patients in the Control Group ($p<0.001$ for both). This was statistically superior to medical management alone.

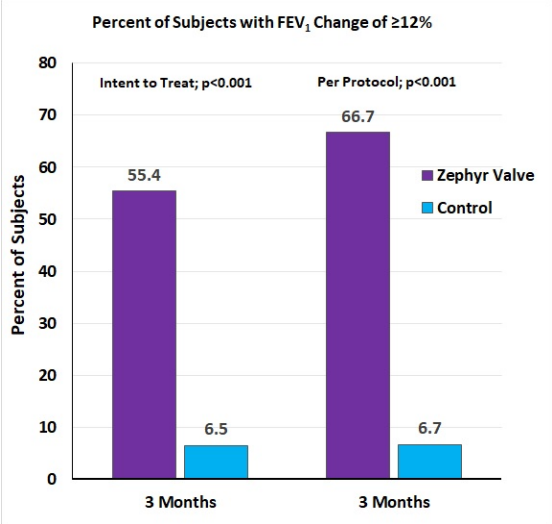
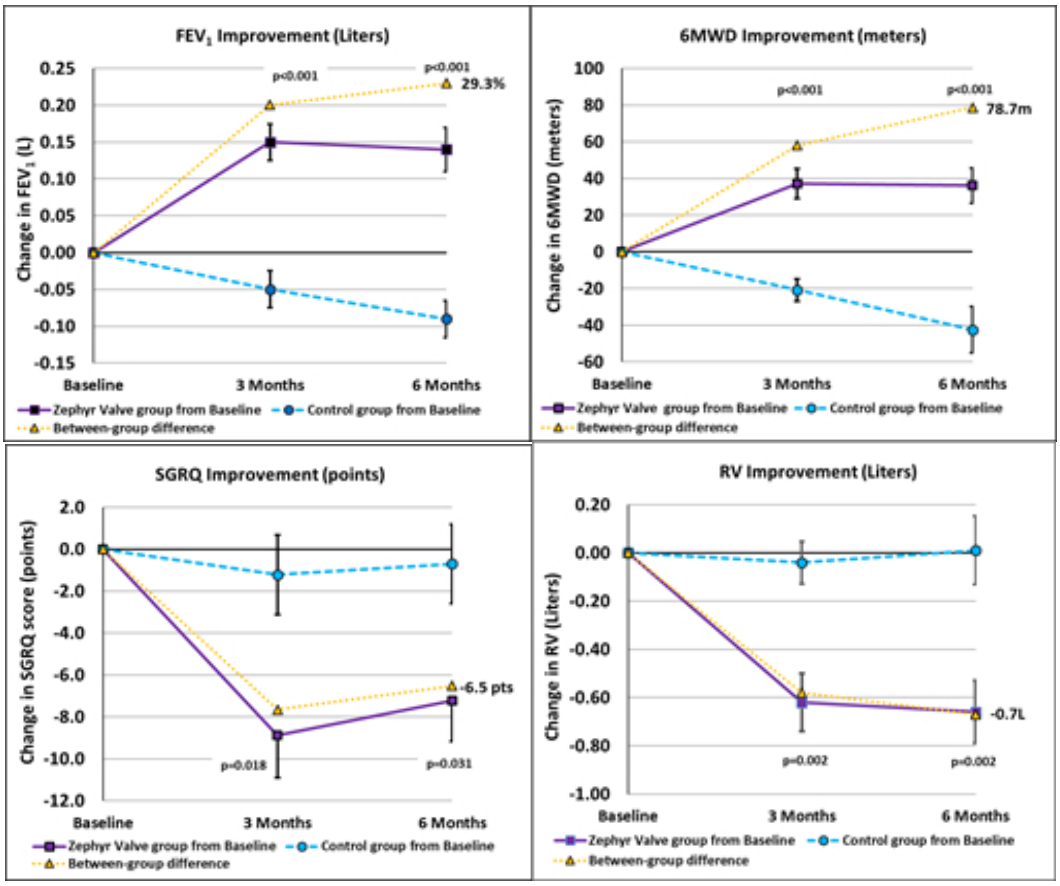
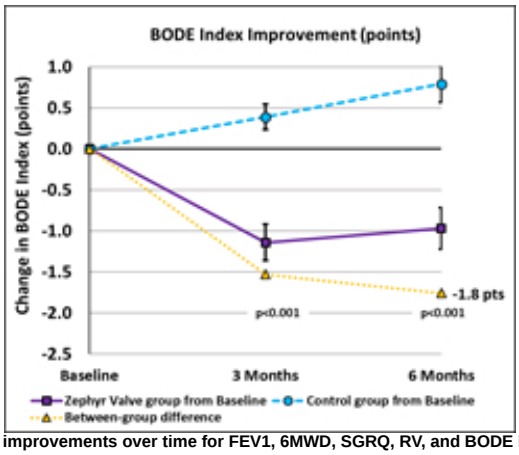


Figure above shows the responder rate (primary endpoint) for the Intention-to-Treat and Per Protocol Populations at three months

The study met its secondary endpoints, with durable and statistically significant benefits in favor of the Zephyr Valve Group out to six months across multiple measures. Lung function assessed by FEV_1 showed a 29% ($p<0.001$) improvement in the Zephyr Valve Group over the Control Group, exercise capacity assessed by 6MWD improved by 79 meters ($p<0.001$), quality of life assessed by the SGRQ score improved by 6.5 points ($p=0.031$), hyperinflation assessed by a decrease in residual volume improved by 670 mL ($p=0.002$), and health status assessed by the BODE Index improved by 1.75 points ($p<0.001$). Target lobe volume reduction was successfully achieved with 90% of patients having volume reductions of greater than MCID.





Figures above show the improvements over time for FEV1, 6MWD, SGRQ, RV, and BODE Index out to six months.

Safety

At six months, 47.7% patients in the Zephyr Valve Group compared to 9.4% patients in the Control Group ($p<0.001$) had a respiratory related serious adverse event, with most events occurring within 45 days of the procedure. In the Zephyr Valve Group, there were 13 pneumothorax events in 13 patients (20%) during the 45-day Treatment Period ($p=0.004$). None of the other respiratory serious adverse events were statistically different between groups during the same period. Over the longer term (46 days through six months), there was no difference in respiratory serious adverse events between groups. There was one death in the Zephyr Valve Group due to an in-hospital cardiac arrest as a complication of a pneumothorax and was deemed by the investigator to be related to treatment with Zephyr Valves. See also "Risk Factors — Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations."

Summary of the IMPACT Study

The IMPACT Study was a company sponsored, multicenter, randomized, controlled clinical trial of Zephyr Valves in patients with severe homogeneous emphysema at eight investigational sites in Europe. The study was conducted between August 2014 and March 2017, and the results of the primary endpoint at three months were published in August 2016 in the *American Journal of Respiratory and Critical Care Medicine.*

Key inclusion criteria were emphysema patients with homogeneous disease (<15 difference in destruction scores between the target and adjacent lobes), ex-smokers over 40 years of age, with post- BD FEV_1 between 15% and 45% predicted, TLC greater than 100% predicted, RV equal to or greater than 200% predicted, a 6MWD equal to or greater than 150 meters and little to no collateral ventilation. Patients with three or more COPD exacerbations requiring hospitalization in the last year, known pulmonary hypertension, myocardial infarction or other relevant cardiovascular events in prior six months, and prior LVR or LVRS, and greater than 20% difference in perfusion between the left and right lung were excluded from the study. Eligible patients were randomly assigned at a 1:1 ratio into either the Zephyr Valve procedure plus medical management (Zephyr Valve Group) or medical management alone (which may include drug therapy, pulmonary rehabilitation and supplemental oxygen) (Control Group) (43 Zephyr Valve patients: 50 Control Group patients).

The Chartis System was used to confirm that all 93 patients had little to no collateral ventilation and would be likely responders to the Zephyr Valve treatment, and were evaluated initially at six months with follow-up for an additional six months.

The primary effectiveness endpoint was the percentage change in FEV_1 at three months relative to baseline in the Zephyr Valve Group, compared to the Control Group.

Other endpoints included additional measures of lung function, exercise capacity and quality of life measures. Adverse events and serious adverse events were evaluated for the Treatment Period (day of procedure to 30 days), and Long-Term Period (31 days after procedure to six months).

Results

Effectiveness

The study met its primary effectiveness endpoint. The mean percent change in FEV_1 (L) from baseline to three months in the Zephyr Valve Group was an increase of 15.3% compared to a decrease of 3.4% in the Control Group. The mean group difference for the change in FEV_1 from baseline to three months was 18.8 ± 22.1% (mean ± SD; p <0.001). Similar changes were observed in the ITT population. The mean percent change in FEV_1 (L) from baseline to three months in the Zephyr Valve Group was an increase of 13.7% compared to a decrease of 3.2% in the Control Group. The mean group difference (Zephyr Valve - Control) for the change in FEV_1 from baseline to three-months was 17.0 ± 21.4% (mean ± SD; p <0.001).

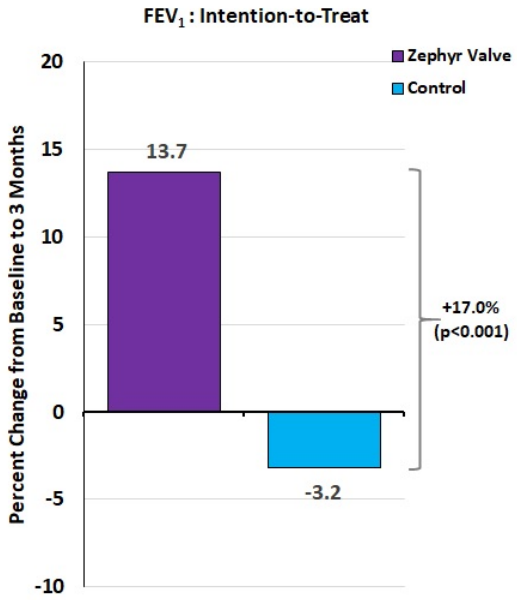


Figure above shows the percent change of FEV_1 from baseline (primary endpoint) for the ITT groups at three months

The study also met its secondary outcomes. There were statistically significant and clinically meaningful improvements from baseline in the Zephyr Valve Group versus the Control Group at three months and six months with differences between the Zephyr Valve Group and Control Group for FEV_1 (120 mL at 3 months and 120 mL at six months; p<0.001), RV (480 mL at three months and 430 mL at six months; p=0.011 and p=0.015, respectively), 6MWD (40 meters at three months and 28 meters at six months; p=0.002 and p=0.0156, respectively), SGRQ score (-9.6 at three months and -7.5 at six months; p<0.001), and Modified Medical Research Council (mMRC) Dyspnea Scale scores (-0.6 at three months and -0.4 at six months; p=0.01 and p=0.048, respectively). Target lobe volume reduction was successfully achieved with 89% of patients having volume reductions of greater than MCID.

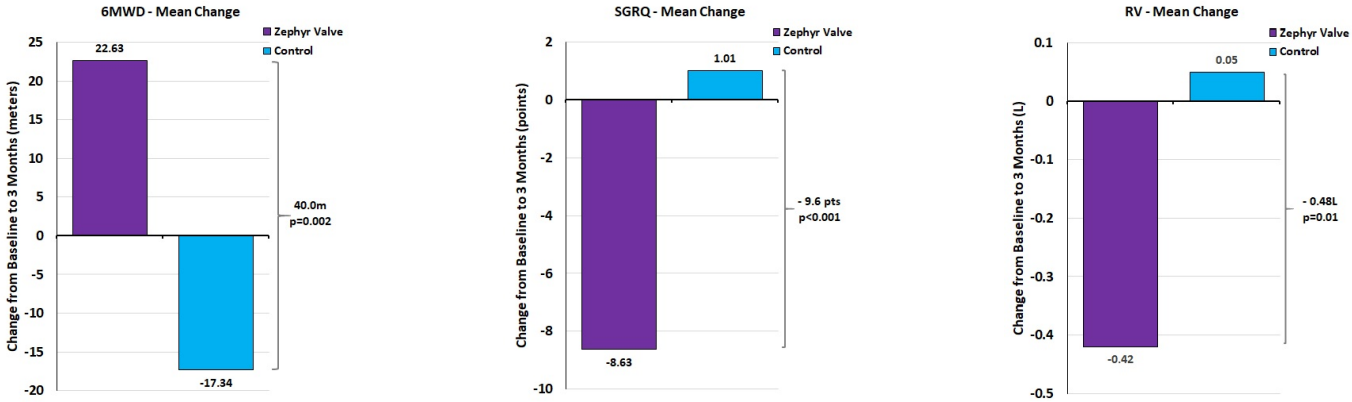


Figure above presents secondary endpoints as mean changes ± SEM from baseline to six months for the Zephyr Valve and Control Groups

Safety

There were a higher number of respiratory serious adverse events in the Zephyr Valve Group compared to the Control Group during the Treatment Period (day of procedure to 30 days; 44.2% patients versus 2.0% patients). The most common respiratory serious adverse events in the Zephyr Valve Group versus the Control Group during the Treatment Period were pneumothorax in 23.3% versus 0.0%, respectively; and COPD exacerbations in 14.0% versus 2.0% patients, respectively. All pneumothoraces were managed using standard techniques that included chest tube placement and careful observation. There were a comparable number of serious respiratory adverse events in the Zephyr Valve Group compared to the Control Group during the Longer-Term Period (31 days to six months; 34.9% patients versus 26.0% patients, respectively).

The most common respiratory adverse events in the Zephyr Valve Group versus Control Group during the Longer-Term Period were COPD exacerbations in 18.6% versus 20.0% patients, respectively; dyspnea in 4.7% versus 0.0% patients, respectively; pneumothorax in 4.7% versus 0.0% patients, respectively; pneumonia in 2.3% versus 4.0% patients, respectively; and hypercapnia in 0.0% versus 6.0% patients, respectively. There were no deaths in the Zephyr Valve Group and two deaths in the Control Group that occurred in the Longer-Term Period. There was one death in the Zephyr Valve Group that occurred beyond 12-months after the Zephyr Valve implantation following severe COPD exacerbation after an abdominal surgery and was not related to treatment with Zephyr Valves. See also “Risk Factors — Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations.”

Summary of the STELVIO Study

The STELVIO study was an independent, non-company sponsored, randomized, controlled clinical trial conducted at a single center in the Netherlands that evaluated 68 patients with severe emphysema and hyperinflation. The study

was conducted between June 2011 and November 2014, and the results of the primary endpoint were published in November 2015 in *The New England Journal of Medicine*.

Key inclusion criteria were severe emphysema patients with heterogeneous and homogeneous disease, ex-smokers over 35 years of age, with post- BD FEV_1 less than 60% predicted, TLC greater than 100% predicted, RV greater than 150% predicted, dyspnea score of equal to or greater than two on the mMRC Dyspnea Scale, a 6MWD equal to or greater than 140 meters, and little to no collateral ventilation. Key exclusion criteria were prior LVRS, lung transplantation or lobectomy and evidence of other disease that may compromise survival or would interfere with completion of study. Eligible patients were randomly assigned at a 1:1 ratio to either Zephyr Valve treatment plus medical management (Zephyr Valve Group) or medical management alone (which may include drug therapy, pulmonary rehabilitation and supplemental oxygen) (Control Group) (34 Zephyr Valve patients: 34 Control Group patients).

The Chartis System was used to confirm that all 68 patients had little to no collateral ventilation and would be likely responders to the Zephyr Valve treatment, and were evaluated initially at six months with follow-up for an additional six months.

The primary outcome measures included differences between groups for changes in FEV_1, Forced Vital Capacity (FVC) and 6MWD from baseline to six months.

Secondary outcome measures, among patients who completed the study, were improvements from baseline to six months in FEV_1, FVC, 6MWD, SGRQ score and other health related measures.

Results

Effectiveness

The study met its primary and secondary effectiveness outcomes.

There were significantly greater improvements in the Zephyr Valve Group than in the Control group from baseline to six months with a between group increase in FEV_1 of 140 mL (95% confidence interval (CI), 55 to 225), in FVC of 347 mL (95% CI, 107 to 588), in the 6MWD of 74 m (95% CI, 47 to 100) ($p<0.01$ for all comparisons). The data are depicted in the figure and table below. Target lobe volume reduction was successfully achieved with 88% of patients having volume reductions of greater than MCID.

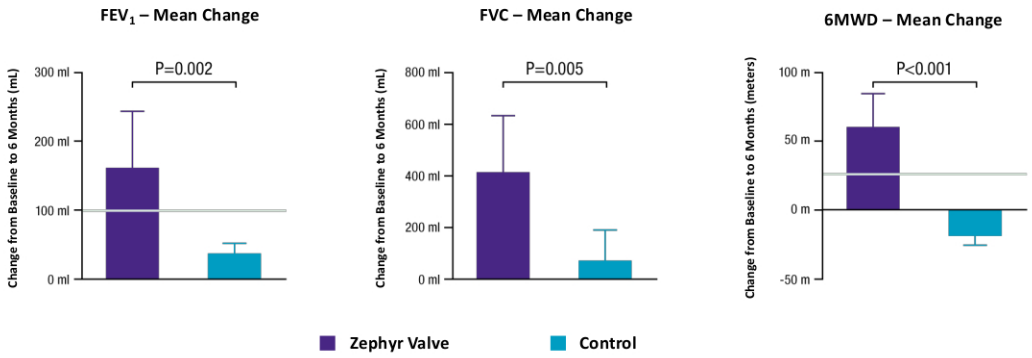


Figure above presents the co-primary endpoints as mean changes with 95% confidence intervals from baseline to six months for the Zephyr Valve and Control Groups

Effectiveness Outcomes for the Zephyr Valve and Control Groups at Six Months
Values are Mean Change from Baseline for ITT Population

	Zephyr Valve Group N=34	Control Group N=34	Difference Between Groups (Zephyr Valve - Control)
FEV_1 (%)	+20.9	+3.1	+17.8
FVC (%)	+18.3	+4.0	+14.4
6MWD (%)	+19.6	-3.6	+23.3

STELVIO was also the first randomized trial that evaluated outcomes in patients with homogeneous disease versus heterogeneous disease and showed that both groups benefited from treatment with Zephyr Valves. In general, the clinical outcomes after Zephyr Valve treatment were lower in the homogeneous patients compared to the heterogeneous patients but were still clinically meaningful (i.e., were greater than the MCID for each measure).

Effectiveness Outcomes for the Zephyr Valve Group who Completed the Study
Values are Mean Change from Baseline

	Homogeneous Emphysema N=29	Heterogeneous Emphysema N=22
FEV_1 (%)	+20.1	+32.6
RV (%)	-16.3	-16.6
6MWD (meters)	+69	+72
SGRQ score (points)	-13	-19

In subsequent follow-up of patients in the STELVIO study, these results were shown to be durable to at least one year. Furthermore, the BODE index at one year showed an improvement from baseline of -1.13 points (95% CI, -1.5 to -0.7; $p < 0.001$); a reduction of more than one point in the BODE Index being associated with a decrease in mortality.

Safety

Over the six months, there were 23 serious adverse events in the Zephyr Valve Group, as compared with five in the Control group ($p<0.001$). Serious treatment related adverse events in the Zephyr Valve Group included pneumothorax (18% of patients) and events requiring valve replacement (12%) or removal (15%). There was one death in the Zephyr Valve Group due to end-stage COPD with respiratory failure 58 days after treatment which was deemed by the investigator to be unrelated to treatment with Zephyr Valves.

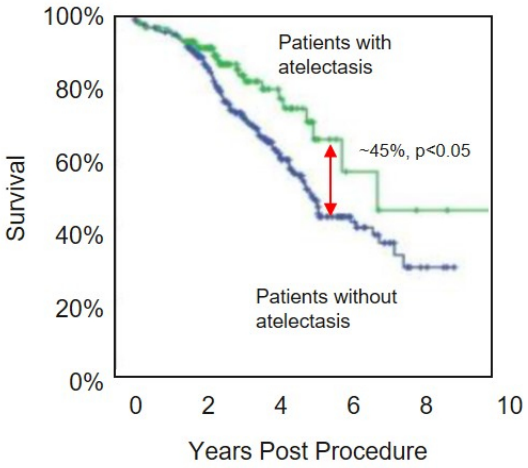
There was one death during the six-month to 12-month period in the Zephyr Valve Group due to a myocardial infarction (313 days after treatment) unrelated to treatment with Zephyr Valves. In the Control Group, there were two deaths recorded at 160 and 267 days after the screening visit, both due to COPD progression. See also “Risk Factors — Use of the Zephyr Valve involves risks and may result in complications, including pneumothorax or death, and is contraindicated in certain patients, which may limit adoption and negatively affect our business, financial condition and results of operations.”

Other Clinical Trials

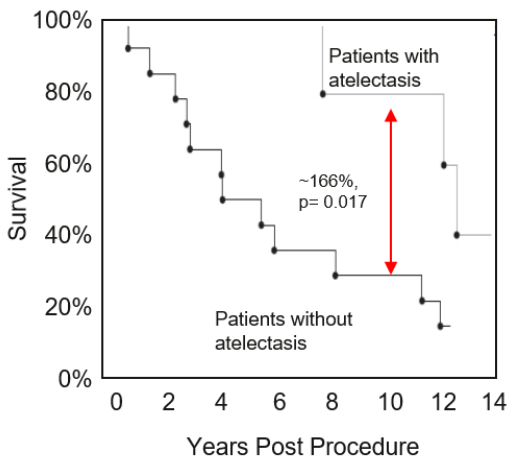
The VENT study was a multicenter randomized clinical trial conducted in the mid-2000s by Emphasys Medical evaluating the safety and effectiveness of the Zephyr Valve. The study enrolled 321 patients in the United States. While the study showed statistically significant improvement in FEV_1 and 6MWD (co-primary endpoints), these were only clinically significant in a post hoc subset of patients that had complete fissures (a surrogate for absence of collateral ventilation) and lobar occlusion. The study did not meet its primary endpoints.

The BeLieVeR-HIFi study was a single center randomized, controlled, independent, non-company-sponsored study conducted in the early 2010s that enrolled 50 patients with complete fissures and severe heterogeneous emphysema. Patients were randomized to treatment with Zephyr Valves and medical management or a sham procedure and medical management. While Chartis assessment was performed to assess collateral ventilation prior to the procedure, inclusion in the study was based on visual assessment of complete fissures. The study showed clinical benefit in the Zephyr Valve treated patients although the outcomes were better in patients in whom collateral ventilation was ruled out using the Chartis System.

We are not aware of any prospective data regarding survival rates of patients who have undergone endobronchial valve treatment. There are two survival studies, however, that retrospectively evaluate patients treated with endobronchial valves. These studies compared survival rates between patients with significant volume reduction in the treated lobe (also called atelectasis) against those who did not have atelectasis. In one study, the patient population consisted of 449 patients with either heterogeneous or homogeneous emphysema five years following treatment with Zephyr Valves or other endobronchial valves. The majority of patients in this study were treated with Zephyr Valves. The results of this study suggested that patients with atelectasis were approximately 45% more likely to survive than patients without. Another study of 19 patients with only heterogeneous emphysema ten years following treatment with Zephyr Valves suggested that patients with atelectasis were approximately 166% more likely to survive than patients without atelectasis. We believe these studies are relevant because treatment with Zephyr Valves is intended to cause atelectasis in poorly functioning, hyperinflated lobes of the lung. In addition, the results of these studies add to the body of evidence showing the benefits of atelectasis in patients with severe emphysema and hyperinflation, including the potential for increased survival rates when compared to valve treatment without atelectasis.



Gompelmann et. al (2019): Survival after Endoscopic Valve Therapy in Patients with Severe Emphysema. Respiration; 97; 145-152.



Garner et al (2016): Survival after Endobronchial Valve Placement for Emphysema: A 10-Year Follow-up Study. Amer J Respir Crit Care Med.194 (4): 519-521.

Our Commercial Strategy

We have established a stepwise approach to market development which centers on active engagement across three key stakeholders in addressing severe emphysema: hospitals, physicians and patients.

We sell Zephyr Valves primarily through a direct sales force that engages with pulmonologists in the United States, Europe and Asia Pacific. Zephyr Valves are typically implanted by an interventional pulmonologist at a hospital, and

patients are often evaluated in a multi-disciplinary team approach that includes other lung physicians, radiologists, respiratory therapy specialists or surgeons. Our sales personnel work closely with these stakeholders to ensure quality outcomes. We offer an in-depth training program developed in conjunction with leading global thought leaders and the largest pulmonary society in the United States. Our sales personnel work with hospitals to leverage their existing resources to efficiently establish and market Zephyr Valves as a service line. Our sales territory managers also call on community physicians and pulmonary rehabilitation centers to raise awareness of Zephyr Valves as a treatment option.

As of December 31, 2019, we had 32 sales territory managers in the United States. As of December 31, 2019, we also had 26 sales territory managers outside of the United States, with 18 in Europe and eight in Asia Pacific. We seek to recruit territory managers with strong sales backgrounds, with direct experience developing markets with new technologies and an understanding of medical device reimbursement and the prior authorization process. In the United States, our territory managers are managed by region directors. We plan to expand our commercial organization, recruiting and training talented sales territory managers in existing and new markets in the United States to help facilitate further adoption and broaden awareness of Zephyr Valves. We believe investing in a scalable, efficient direct sales force and continuing the development of our marketing efforts will help us broaden adoption of our solution in order to drive revenue growth.

Our strategy is to identify territories with high unmet need, identify leading hospitals and work with champions of our solution to build emphysema centers of excellence. We believe there is a significant growth opportunity for hospitals to provide high quality comprehensive diagnosis and treatment for advanced COPD patients. We believe we can efficiently serve the United States market, focusing on approximately 500 high volume hospitals, of which we currently cover a small fraction.

We intend to continue to promote awareness of our solution through training and educating physicians, pulmonary rehabilitation centers, key opinion leaders and various medical societies on the proven clinical benefits of Zephyr Valves. We continue to develop our relationships with credible third parties, such as our partnership with the American College of Chest Physicians, on continuing medical education-accredited training and with the COPD Foundation on patient and physician education. We also intend to continue helping physicians in their outreach to patients and other healthcare providers. In addition, we intend to continue to publish additional clinical data in various industry and scientific journals, online and through presentations at various industry conferences. We believe that many patients who suffer from severe emphysema are eager for a minimally invasive option such as the Zephyr Valve. We also plan to continue building patient awareness through our direct-to-patient marketing initiatives, which include advertising, social media and online education. We also intend to continue helping physicians in their outreach to patients and other healthcare providers.

The objective of this outreach is to bring patients to our website, where they can find educational materials on Zephyr Valves, determine if they may be eligible, find contact information for physicians in their area and sign up for support and news.

We believe our patient outreach efforts have been effective in bringing potential patients to our website and facilitating contact with hospitals that provide more information about our solution. In the fourth quarter of 2019, we had over 100,000 visitors to our website; over 2,000 visitors used our website to find a physician or hospital that provides our solution in their area, and we registered more than 1,800 calls to such hospitals to schedule an appointment.

Commercial Activities Outside of the United States

We conduct our international business through direct sales in markets with established reimbursement and substantial market potential, and through a distributor-based sales model in smaller markets or markets where we are still developing reimbursement. Direct sales represented over 90% of our international sales in 2019, which totaled $21.9 million.

As of December 31, 2019, we had 26 sales territory managers in international markets in which we make direct sales, with 18 in Europe and eight in Asia Pacific, including in Australia, Austria, France, Germany, Italy, the Netherlands, Spain, Switzerland and the United Kingdom. We also maintain a direct sales presence in China to support our sub-distributors and distributors.

Our strategy is to offer limited distribution and develop champions of our solution in high potential markets, and as reimbursement becomes available, change from a distributor-based sales model to a direct sales model. We have successfully followed this approach in most markets outside the United States in which we sell and we anticipate following a similar approach in the future.

Third-Party Reimbursement

There are three key components for reimbursement in the United States: (1) coding, (2) payment and (3) coverage. Our patient reimbursement support team is responsible for all aspects of our reimbursement processes and initiatives. In the United States, our solution is reimbursed based on established Category I CPT and ICD-10 PCS codes and associated MS-DRG and APC payment groupings.

Coding

In the United States, we sell our products to hospitals. These customers in turn bill various third-party payors, such as commercial payors and government agencies, for the cost required to treat each patient.

Third-party payors require physicians and hospitals to identify the service for which they are seeking reimbursement by using standard codes for both physician and facility payments. “Coding” refers to distinct numeric and alphanumeric billing codes that are used by healthcare providers to report the provision of medical services procedures and the use of supplies for specific patients to payors. CPT codes are published by the American Medical Association and are used to report medical services and procedures performed by or under the direction of physicians. Medicare pays physicians for services based on submission of a claim using one or more specific CPT codes. Physician payment for procedures may vary according to site of service. Hospitals are reimbursed for inpatient procedures based on MS-DRG classifications derived from ICD-10-CM diagnosis and ICD-10 PCS codes that describe the patient’s diagnoses and procedures performed during the hospital stay. MS-DRG classifications closely calibrate payment for groups of services based on the severity of a patient’s illness and clinical cohesiveness of care. One single MS-DRG payment is intended to cover all hospital costs associated with treating a patient during his or her hospital stay, with the exception of physician charges associated with performing medical procedures, which are reimbursed through CPT codes and payments.

Payment

Payment refers to the amount paid to providers for specific procedures and supplies. Physician reimbursement under Medicare generally is based on a defined fee schedule (Physician Fee Schedule) through which payment amounts are determined by the relative values of the professional service rendered. Medicare provides reimbursement to our hospital customers as a lump sum intended to cover all costs under a single MS-DRG payment. Reimbursement from commercial payors is typically based on a similar methodology but rates vary depending on the procedure performed, the hospital, the commercial payor, contract terms and other factors.

The American Hospital Association Coding Clinic provided guidance on the use of ICD-10 PCS codes for endobronchial valve procedures in Q3 2019. These ICD-10 PCS codes map to the MS-DRG classifications for Major Chest Procedures, with national average reimbursement rates between $11,000 and $30,000, for the year 2020, depending on co-morbidities and complications. Payment for Zephyr Valve is expected to, on average, be sufficient to cover costs of the procedure.

If a patient is positive for collateral ventilation following an assessment by the Chartis System, the patient is discharged the same day and the procedure will be billed as an outpatient procedure. The CPT code used to provide payment for the Chartis procedure, for patients who do not receive the Zephyr Valve due to collateral ventilation,

maps to an Ambulatory Payment Classification, with a national average payment of $5,148. If a patient receives the Zephyr Valve, there is no separate reimbursement for the Chartis System procedure; rather, the provider receives payment for the endobronchial valve procedures as described above.

The national Medicare average payment for physicians performing the endobronchial valve procedure is generally consistent with other complex bronchoscopic procedures.

Commercial Payor and Government Program Coverage

Coverage refers to decisions made by commercial third-party payors and government programs as to whether or not to provide their members access to and pay for specific procedures and related supplies, and if so, what conditions, such as specific diagnoses and clinical indications, are covered. Commercial payors typically base coverage decisions on reviews of clinical evidence presented in published peer-reviewed medical literature.

A majority of our patients are Medicare-eligible beneficiaries. Without a national coverage determination (NCD) or a local coverage determination (LCD), Medicare claims are managed by local carriers under Medicare's medical necessity requirement. We estimate that roughly 75% of the potential Zephyr Valve patient population are Medicare/Medicaid beneficiaries of which approximately 25% have managed Medicare/Medicaid and the remaining 50% have traditional Medicare/Medicaid. Approximately 25% of the potential Zephyr Valve patient population is under third-party commercial payor policies. A key element of our strategy remains to broaden our coverage by private third-party payor policies.

As of December 31, 2019, commercial payors such as Aetna, Humana, Priority Health and Emblem Health have issued positive coverage policies for endobronchial valve procedures. United Healthcare removed the endobronchial valve codes from their non-covered list, and, as such, no longer considers the procedure unproven or experimental. Other commercial payors, such as many plans in the Blue Cross Blue Shield family of plans, do not yet consider our solution medically necessary, but these same plans are approving pre-authorization requests on a case-by-case basis. We continue to engage with commercial payors to establish positive national coverage policies by highlighting our compelling and robust clinical data, unique patient selection tools, favorable cost profile to more invasive options, increased patient demand and support from global treatment recommendations for the management of COPD and emphysema.

Prior Authorization Approval Process

A second key element of our reimbursement strategy includes leveraging our patient reimbursement support team and knowledge of the published data to assist patients and physicians in obtaining appropriate prior authorization approvals in advance of treatment. We believe our patient reimbursement support team is highly effective in working with patients and physicians to obtain appropriate prior authorizations for the Zephyr Valve treatment even when a non-coverage policy exists. We believe patients and providers will continue to benefit from support through the prior authorization process until widespread coverage is established across most commercial payors.

Reimbursement Outside of the United States

Outside of the United States, reimbursement levels vary significantly by country and by patient. Reimbursement is obtained from a variety of sources, including government sponsors, hospital budgets or private health insurance plans, or combinations thereof. We have established reimbursement access in countries across Europe and Asia Pacific, including Australia, Germany, the Netherlands, South Korea, the United Kingdom and other countries.

Research, Development and Clinical Programs

Our research and development team continues to design, develop and test new innovations to improve patient outcomes and expand our addressable market. We also work with external vendors in the design and testing of new technologies.

Since the early development of the Zephyr Valve, our company has produced a stream of innovations to increase the success rate of using the Zephyr Valve. This includes innovations in our airway sizing and delivery catheters, the introduction of new sizes of Zephyr Valves, improvements to the user interface of the Chartis System to accommodate a variety of anesthesia options and the StratX Platform to assist with patient selection and procedure planning.

We are in discussions with the FDA regarding the potential use of Zephyr Valves for the management of persistent air leaks. We believe there are approximately 7,000 patients who suffer from a persistent air leak per year in the United States that could benefit from treatment with Zephyr Valves.

Our pipeline of products that we are currently considering includes innovations in image analysis to support advanced patient selection and optimize patient outcomes, catheter technologies to improve valve deliverability and reduce procedure time and the AeriSeal system for addressing the needs of severe emphysema patients who are not eligible for Zephyr Valves due to collateral ventilation.

AeriSeal is a polymeric foam that can be delivered via a bronchoscope to a targeted region of the lung to induce an inflammatory response and reduce volume in the treated area. We intend to submit an IDE to the FDA for commencing a clinical trial with the AeriSeal system. We have only conducted initial feasibility research on AeriSeal to date. We believe that positive results from this clinical trial would enable the treatment of patients with collateral ventilation, which would complement the screening of patients for Zephyr Valves. We have secured CE mark and Therapeutic Goods Administration approval in Australia for AeriSeal and have completed initial feasibility research. We further have funded a feasibility study using AeriSeal to expand the number of patients that can be treated with Zephyr Valves and are exploring additional studies. If successfully developed and approved, AeriSeal could further expand the addressable market of our solution.

For the years ended December 31, 2018 and December 31, 2019, we incurred research and development expenses, including our clinical trials, of $7.0 million and $6.0 million, respectively.

Competition

Our industry is highly competitive and subject to rapid change from the introduction of new products and technologies and other activities of industry participants.

We are positioning our solution as an alternative to existing treatments of severe emphysema. These treatments include medical management, other minimally invasive treatments, LVRS and lung transplantations. The major competitive products include the Spiration Valve System (Olympus Corporation) and the InterVapor System (Broncus Medical, Inc.; not approved for use in the United States). The Spiration Valve System is an endobronchial technology designed to offer patients with severe emphysema a minimally invasive treatment option for lung volume reduction by redirecting air away from diseased areas of the lung to healthier tissue so that patients may breathe easier. Like Zephyr Valves, the Spiration Valve System is indicated to treat patients with heterogeneous emphysema; however, the Spiration Valve System is contraindicated for patients with homogeneous emphysema. We believe our solution competes favorably with the Spiration Valve System for several reasons, including the strength of our published clinical data, differentiated patient selection tools and our comprehensive technical and reimbursement support. InterVapor System offers a non-surgical and non-implant therapy developed for lung disease including emphysema and lung cancer where vapor ablation is simply the application of heated pure water to tissue.

Some of our current or future competitors may have several competitive advantages, including established relationships with pulmonologists who commonly treat patients with emphysema, significantly greater name recognition and significantly greater sales and marketing resources.

In addition to competing for market share, we also compete against these companies for personnel, including qualified sales and other personnel that are necessary to grow our business.

We believe the principal competitive factors in our market include the following:

- patient outcomes and adverse event rates;
- product safety, reliability and durability;
- patient experience;
- effective marketing to and education of patients, physicians and hospitals;
- acceptance by treating physicians and referral sources;
- physician learning curve;
- ease-of-use and reliability;
- patient recovery time and level of discomfort;
- economic benefits and cost savings;
- availability of coverage and adequate reimbursement; and
- strength of clinical evidence.

In addition to existing competitors, other companies may acquire or in-license competitive products and could directly compete with us. These competitors may also try to compete with us on price both directly, through rebates and promotional programs to high volume physicians and coupons to patients, and indirectly, through attractive product bundling with complementary products that offer convenience and an effectively lower price compared to the total price of purchasing each product separately. Larger competitors may also be able to offer greater customer loyalty benefits to encourage repeat use of their products and finance a sustained global advertising campaign to compete with commercialization efforts of our products. Our competitors may seek to discredit our products by challenging our short operating history or relatively limited number of scientific studies and publications. Smaller companies could also launch new or enhanced products and services that we do not offer and that could gain market acceptance quickly. Additionally, certain of our competitors may challenge our intellectual property, may develop additional competing or superior technologies and processes and compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our market, there is the possibility of a competitor acquiring patents or other rights that may limit our ability to update our technologies and products which may impact demand for our products.

Intellectual Property

We rely on a combination of patent, copyright, trademark and trade secret laws and confidentiality and invention assignment agreements to protect our intellectual property rights. As of December 31, 2019, we had 40 patent families in force worldwide. As of December 31, 2019, we had rights to 65 issued United States patents, 15 pending United States patent applications, 124 issued foreign patents and 15 pending foreign patent applications. Our most material foreign patents issued and patent applications pending are in the European Union, France, Germany, Japan and the United Kingdom. Our patents cover aspects of our current Zephyr Valve, loading system, airway sizing, EDC, Chartis System, AeriSeal and future product concepts. The term of individual patents depends on the legal term for patents in the countries in which they are granted. In most countries, including the United States, the patent term is generally 20 years from the earliest claimed filing date of a nonprovisional patent application in the applicable country. Our patents expire between 2020 and 2037. We have applied to the U.S. Patent and Trademark Office (USPTO) seeking an extension for the term of a material Zephyr Valve patent from 2023 to 2027 under the

Patent Term Extension which allows additional term to be added to a patent to compensate for the FDA approval process. Once a patent expires, the protection ends, and an invention enters the public domain; that is, anyone can commercially exploit the invention without infringing the patent.

There is no active patent litigation involving any of our patents and we have not received any notices claiming that our activities infringe a third party's patent.

We cannot guarantee that patents will be issued from any of our pending applications or that, if patents are issued, they will be of sufficient scope or strength to provide meaningful protection for our technology. Notwithstanding the scope of the patent protection available to us, a competitor could develop treatment methods or devices that are not covered by our patents. Furthermore, numerous United States and foreign-issued patents and patent applications owned by third parties exist in the fields in which we are developing products. Because patent applications can take many years to publish, there may be applications unknown to us, which may later result in issued patents that our existing or future products or technologies may be alleged to infringe.

There has been substantial litigation regarding patent and other intellectual property rights in the medical device industry. In the future, we may need to engage in litigation to enforce patents issued or licensed to us, to protect our trade secrets or know-how, to defend against claims of infringement of the rights of others or to determine the scope and validity of the proprietary rights of others. Litigation could be costly and could divert our attention from other functions and responsibilities. Furthermore, even if our patents are found to be valid and infringed, a court may refuse to grant injunctive relief against the infringer and instead grant us monetary damages or ongoing royalties. Such monetary compensation may be insufficient to adequately offset the damage to our business caused by the infringer's competition in the market. Adverse determinations in litigation could subject us to significant liabilities to third parties, require us to seek licenses from third parties or could prevent us from manufacturing, selling or using the product accused of infringement, any of which could severely harm our business. See "Risk Factors—Risks Related to our Intellectual Property" for additional information regarding these and other risks related to our intellectual property portfolio and their potential effect on us.

We also rely upon trademarks to build and maintain the integrity of our brand. As of December 31, 2019, we had eight registered trademark filings, some of which may apply to multiple countries, and several pending trademark applications in various countries.

We also rely, in part, upon unpatented trade secrets, know-how and continuing technological innovation, and licensing arrangements, to develop and maintain our competitive position. We protect our proprietary rights through a variety of methods, including confidentiality and assignment agreements with suppliers, employees, consultants and others who may have access to our proprietary information.

Cross-Licensing Agreement with Spiration/Olympus

In January 2005, Emphasys Medical (Emphasys), a company we later acquired, entered into a cross-license agreement (Spiration Cross-License) with Spiration, Inc. (Spiration) (later acquired by Olympus Medical Systems Corp.). Since both companies were developing products in the same field, they entered into this agreement to minimize the risk of intellectual property disputes in the future and their associated cost. When we acquired Emphasys in 2009, we became the successor-in-interest to Emphasys' rights under the Spiration Cross-License. Under the agreement, each company non-exclusively licensed the other party to make, have made (solely for such other party), sell, offer for sale, import and export specific products under their respective patent portfolio at that time that covers such products or a method of use thereof. The license granted to us by Spiration is limited to devices where the outer perimeter of the device seals with the airway wall and the device allows fluid flow only through one or more openings in the device radially inward of such outer perimeter. It does not give us a license under Spiration's patent rights to valve devices that allow fluid flow only between the outer perimeter of the device and the airway wall. Similarly, the license granted to Spiration by us is limited to devices that allow fluid flow only between the outer perimeter of the device and the airway wall. It does not give Spiration a license under our patent rights to make or sell valve devices where the outer perimeter of the device seals with the airway wall and the device allows fluid flow only through one or more openings in the device radially inward of such outer perimeter. The

licenses cannot be sublicensed. Furthermore, each license also includes a covenant not to sue the other party for infringement with respect to specified product elements, designs and features. The Spiration Cross-License can be terminated by either party upon 60 days' written notice to the other in the event certain patents are no longer owned by the other party or such patents are no longer in force; provided, that, the parties are required to negotiate in good faith during such 60-day notice period to attempt to enter into a replacement cross-license prior to such termination. Neither party may assign or otherwise transfer the Spiration Cross-License without the written consent of the other party, except in connection with certain change-of-control transactions. We do not have any relationship with Spiration other than with respect to this cross-license agreement.

Manufacturing and Supply

We manufacture all our products — valves, delivery catheters, balloon catheters and the Chartis System console — at our headquarters located at 700 Chesapeake Drive, Redwood City, California 94063 where we lease approximately 25,000 square feet of space. Our lease terminates on July 31, 2025. This facility supports production and distribution operations, including manufacturing, quality control, raw material and finished goods storage. We have manufactured all our products at this facility for over 10 years and to date we have manufactured over 76,000 Zephyr Valves.

We rely on a combination of in-house processing and third-party suppliers for raw materials and components. We have supply agreements with a few critical suppliers while procuring most of our materials on a purchase order basis. Suppliers are routinely evaluated based on industry standards including on-site audits, as required, to be approved. We have a strict change control policy with our suppliers to ensure that no design or process changes are made without our prior approval. Based on our prior experience with such suppliers to manufacture products for commercialization both inside and outside the United States, we believe these suppliers are capable of continuing to meet our specifications and maintaining quality. Several components used in our devices rely on single source suppliers and we routinely prioritize, evaluate and qualify backup sources. We typically maintain several months of product in inventory however if one or more of our single source suppliers were to encounter a manufacturing issue or chooses to end supply, we estimate that some of our custom components could take between one and two years to qualify a second source supplier in all markets. The manufacture of AeriSeal, which is still in development, is completely outsourced to a contract manufacturer. The StratX Platform's QCT service is currently outsourced as well. We host the customer-facing web portal for the StratX Platform's QCT service while using a third-party cloud service provider to direct CT scan uploads from customers to qualified radiological image analysis providers.

We perform the final assembly, inspection, testing, packaging and product release testing for the Zephyr Valve, the EDC and Chartis System at our Redwood City facility. These products are sterilized using ethylene oxide at a qualified sterilization supplier in Los Angeles, California. In the United States, we generally ship products from our Redwood City facility to our direct sales territory managers, who deliver these products to our hospital customers. Once they are trained and proficient in the procedure, we may also sell our products directly to our hospital customers. Internationally, we ship our products to a qualified third-party logistics provider in the Netherlands who, in turn, may either ship directly to our customers in Europe, Australia and other international markets on a consignment basis or directly to our sales territory managers in these countries who then sell these products to our customers. We also ship from our Redwood City facility to distributors in Asia Pacific and other international markets.

Our manufacturing and distribution operations are subject to regulatory requirements of the FDA's QSR for medical devices sold in the United States, set forth in 21 CFR part 820, and the EU's MDD for medical devices marketed in the European Union. We are also subject to applicable local regulations relating to the environment, waste management and health and safety matters, including measures relating to the release, use, storage, treatment, transportation, discharge, disposal, sale, labeling, collection, recycling, treatment and remediation of hazardous substances.

The FDA monitors compliance with the QSR through periodic inspections of our facilities, which may include inspection of our suppliers' facilities as well. Our European Union Notified Body, British Standards Institute (BSI),

monitors compliance with the MDD requirements through both annual scheduled audits and periodic unannounced audits of our manufacturing facilities as well as our contract third-party suppliers' facilities.

Our failure, or the failure of our third-party suppliers, to maintain acceptable quality requirements could result in the shutdown of our manufacturing operations or the recall of our products. If one of our suppliers fails to maintain acceptable quality requirements, we may have to qualify a new supplier, which could adversely affect manufacturing of our products and result in manufacturing delays as well as have a material adverse effect on our business and financial condition.

Our quality management system in our Redwood City manufacturing facility is currently ISO 13485:2016 certified, MDD certified and licensed by the California Department of Public Health (CDPH) Food and Drug Branch. Our manufacturing facility is an FDA-registered medical device establishment.

The FDA conducted a total of two establishment inspections of our manufacturing facility in 2014 and 2016. We believe that we are in compliance, in all material respects, with all applicable FDA and QSR requirements.

Manufacturing of the materials and components of our products are provided by approved suppliers, all of which are single source suppliers of key components, sub-assemblies and materials. The suppliers for the products are evaluated, qualified and approved through a stringent supplier management program, which includes various evaluations, assessments, qualifications, validations, testing and inspection to ensure the supplier can meet acceptable quality requirements. We implement a strict change control policy with our key suppliers to ensure that no component or process changes are made without our prior approval.

Order quantities and lead times for components purchased from suppliers are based on our forecasts derived from historical demand and anticipated future demand. Lead times for components may vary depending on the size of the order, time required to manufacture and test the components, specific supplier requirements and current market demand for the components, sub-assemblies and materials. We perform assembly, testing, inspection and final product release activities for our products.

Government Regulation

United States Food and Drug Administration

Our products and operations are subject to extensive and ongoing regulation by the FDA under the Federal Food, Drug, and Cosmetic Act of 1938 and its implementing regulations (FDCA), as well as other federal and state regulatory bodies in the United States. The laws and regulations govern, among other things, product design and development, pre-clinical and clinical testing, manufacturing, packaging, labeling, storage, record keeping and reporting, clearance or approval, marketing, distribution, promotion, import and export and post-marketing surveillance.

Unless an exemption applies, each new or significantly modified medical device we seek to commercially distribute in the United States will require either a premarket notification to the FDA requesting permission for commercial distribution under Section 510(k) of the FDCA, also referred to as a 510(k) clearance, or approval from the FDA of a PMA application. Both the 510(k) clearance and PMA processes can be resource intensive, expensive and lengthy, and require payment of significant user fees, unless an exemption is available.

Device Classification

Under the FDCA, medical devices are classified into one of three classes—Class I, Class II or Class III—depending on the degree of risk associated with each medical device and the extent of control needed to provide reasonable assurances with respect to safety and effectiveness.

Class I includes devices with the lowest risk to the patient and are those for which safety and effectiveness can be reasonably assured by adherence to a set of FDA regulations, referred to as the General Controls for Medical

Devices (General Controls), which require compliance with the applicable portions of the QSR, facility registration and product listing, reporting of adverse events and malfunctions, and as appropriate, truthful and non-misleading labeling and promotional materials. Some Class I devices, also called Class I reserved devices, also require premarket clearance by the FDA through the 510(k) premarket notification process described below. Most Class I products are exempt from the premarket notification requirements.

Class II devices are those that are subject to the General Controls, and special controls as deemed necessary by the FDA to ensure the safety and effectiveness of the device (Special Controls). These Special Controls can include performance standards, patient registries, FDA guidance documents and post-market surveillance. Most Class II devices are subject to premarket review and clearance by the FDA. Premarket review and clearance by the FDA for Class II devices is accomplished through the 510(k) premarket notification process.

Class III devices include devices deemed by the FDA to pose the greatest risk such as life-supporting or life-sustaining devices, or implantable devices, in addition to those deemed novel and not substantially equivalent following the 510(k) process. The safety and effectiveness of Class III devices cannot be reasonably assured solely by the General Controls and Special Controls described above. Therefore, these devices are subject to the PMA application process, which is generally more costly and time consuming than the 510(k) process. Through the PMA application process, the applicant must submit data and information demonstrating reasonable assurance of the safety and effectiveness of the device for its intended use to the FDA's satisfaction. Accordingly, a PMA application typically includes, but is not limited to, extensive technical information regarding device design and development, pre-clinical and clinical trial data, manufacturing information, labeling and financial disclosure information for the clinical investigators in device studies. The PMA application must provide valid scientific evidence that demonstrates to the FDA's satisfaction a reasonable assurance of the safety and effectiveness of the device for its intended use.

The Zephyr Valve is a Class III device that has received FDA PMA approval.

The Investigational Device Exemption Process

In the United States, absent certain limited exceptions, human clinical trials intended to support medical device clearance or approval require an IDE application. Some types of studies deemed to present "non-significant risk" are deemed to have an approved IDE once certain requirements are addressed and Institutional Review Board (IRB) approval is obtained. If the device presents a "significant risk" to human health, as defined by the FDA, the sponsor must submit an IDE application to the FDA and obtain IDE approval prior to commencing the human clinical trials. The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The IDE application must be approved in advance by the FDA for a specified number of subjects. Generally, clinical trials for a significant risk device may begin once the IDE application is approved by the FDA and the study protocol and informed consent are approved by appropriate IRBs at the clinical trial sites. There can be no assurance that submission of an IDE application will result in the ability to commence clinical trials, and although the FDA's approval of an IDE application allows clinical testing to go forward for a specified number of subjects, it does not bind the FDA to accept the results of the trial as sufficient to prove the product's safety and effectiveness, even if the trial meets its intended success criteria.

All clinical trials must be conducted in accordance with the FDA's IDE regulations that govern investigational device labeling, prohibition of promotion, recordkeeping, and reporting and monitoring responsibilities of study sponsors and study investigators. Clinical trials must further comply with the FDA's good clinical practice regulations for IRB approval and for informed consent and other human subject protections. Required records and reports are subject to inspection by the FDA. The results of clinical testing may be unfavorable, or, even if the intended safety and effectiveness success criteria are achieved, may not be considered sufficient for the FDA to grant marketing approval or clearance of a product. The commencement or completion of any clinical trial may be delayed or halted, or be inadequate to support approval of a PMA application, for numerous reasons, including, but not limited to, the following:

- the FDA or other regulatory authorities do not approve a clinical trial protocol or a clinical trial, or place a clinical trial on hold;
- patients do not enroll in clinical trials at the rate expected;
- patients do not comply with trial protocols;
- patient follow-up is not at the rate expected;
- patients experience adverse events;
- patients die during a clinical trial, even though their death may not be related to the products that are part of the trial;
- device malfunctions occur with unexpected frequency or potential adverse consequences;
- side effects or device malfunctions of similar products already in the market that change the FDA's view toward approval of new or similar PMAs or result in the imposition of new requirements or testing;
- IRBs and third-party clinical investigators may delay or reject the trial protocol;
- third-party clinical investigators decline to participate in a trial or do not perform a trial on the anticipated schedule or consistent with the clinical trial protocol, investigator agreement, investigational plan, good clinical practices, the IDE regulations, or other FDA or IRB requirements;
- third-party investigators are disqualified by the FDA;
- we or third-party organizations do not perform data collection, monitoring and analysis in a timely or accurate manner or consistent with the clinical trial protocol or investigational or statistical plans, or otherwise fail to comply with the IDE regulations governing responsibilities, records and reports of sponsors of clinical investigations;
- third-party clinical investigators have significant financial interests related to us or our study such that the FDA deems the study results unreliable, or we or third-party clinical investigators fail to disclose such interests;
- regulatory inspections of our clinical trials or manufacturing facilities, which may, among other things, require us to undertake corrective action or suspend or terminate our clinical trials;
- changes in government regulations or administrative actions;
- the interim or final results of the clinical trial are inconclusive or unfavorable as to safety or effectiveness; or

- the FDA concludes that our trial design is unreliable or inadequate to demonstrate safety and effectiveness.

The PMA Approval Process

Following receipt of a PMA application, the FDA conducts an administrative review to determine whether the application is sufficiently complete to permit a substantive review. If it is not, the agency will refuse to file the PMA. If it is, the FDA will accept the application for filing and begin the review. The FDA, by statute and by regulation, has 180 days to review a filed PMA application, although the review of an application more often occurs over a significantly longer period of time. During this review period, the FDA may request additional information or clarification of information already provided, and the FDA may issue a major deficiency letter to the applicant, requesting the applicant's response to deficiencies communicated by the FDA. The FDA considers a PMA or PMA supplement to have been voluntarily withdrawn if an applicant fails to respond to an FDA request for information (for example, a major deficiency letter) within a total of 360 days. Before approving or denying a PMA, an FDA advisory committee may review the PMA at a public meeting and provide the FDA with the committee's recommendation on whether the FDA should approve the submission, approve it with specific conditions, or not approve it. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Prior to approval of a PMA, the FDA may conduct inspections of the clinical trial data and clinical trial sites, as well as inspections of the manufacturing facility and processes. Overall, the FDA's review of a PMA application generally takes between one and three years, but may take significantly longer. The FDA can delay, limit or deny approval of a PMA application for many reasons, including:

- the device may not be shown safe or effective to the FDA's satisfaction;
- the data from pre-clinical studies or clinical trials may be found unreliable or insufficient to support approval;
- the manufacturing process or facilities may not meet applicable requirements; and
- changes in FDA approval policies or adoption of new regulations may require additional data.

If the FDA evaluation of a PMA is favorable, the FDA will issue either an approval letter, or an approvable letter, the latter of which usually contains a number of conditions that must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of the FDA, the agency will issue a PMA approval letter authorizing commercial marketing of the device, subject to the conditions of approval and the limitations established in the approval letter. If the FDA's evaluation of a PMA application or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. The FDA also may determine that additional tests or clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and data is submitted in an amendment to the PMA, or the PMA is withdrawn and resubmitted when the data are available. The PMA process can be expensive, uncertain and lengthy and a number of devices for which the FDA approval has been sought by other companies have never been approved by the FDA for marketing.

New PMA applications or PMA supplements are required for modification to the manufacturing process, equipment or facility, quality control procedures, sterilization, packaging, expiration date, labeling, device specifications, ingredients, materials or design of a device that has been approved through the PMA process. PMA supplements often require submission of the same type of information as an initial PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the approved PMA application and may or may not require as extensive technical or clinical data or the convening of an advisory panel, depending on the nature of the proposed change.

In approving a PMA application, as a condition of approval, the FDA may also require some form of post-approval study (PAS) or post-market surveillance, whereby the applicant conducts a follow-up study or follows certain patient

groups for a number of years and makes periodic reports to the FDA on the clinical status of those patients when necessary to protect the public health or to provide additional or longer term safety and effectiveness data for the device. We are subject to certain PAS requirements under our PMA for the Zephyr Valve. PAS reports for the Zephyr Valve Registry study are required every six months for the first two years of the study and annually thereafter. PAS reports for the LIBERATE extension study are required annually. The FDA may also require post-market surveillance for certain devices cleared under a 510(k) notification, such as implants or life-supporting or life-sustaining devices used outside a device user facility. The FDA may also approve a PMA application with other post-approval conditions intended to ensure the safety and effectiveness of the device, such as, among other things, restrictions on labeling, promotion, sale, distribution and use.

Pervasive and Continuing Regulation

After a device is placed on the market, numerous regulatory requirements continue to apply. These include:

- the FDA's QSR, which requires manufacturers, including their suppliers, to follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the manufacturing process;
- labeling regulations and FDA prohibitions against the promotion of products for uncleared, unapproved or off-label uses;
- medical device reporting regulations (MDRs), which require that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur;
- medical device recalls, which require that manufacturers report to the FDA any recall of a medical device, provided the recall was initiated to either reduce a risk to health posed by the device, or to remedy a violation of the FDCA caused by the device that may present a risk to health; and
- post-market surveillance regulations, which apply when necessary to protect the public health or to provide additional safety and effectiveness data for the device.

We have registered with the FDA as a medical device manufacturer and have obtained a manufacturing license from the CDPH. The FDA and CDPH have broad post-market and regulatory enforcement powers. We are subject to unannounced inspections by the FDA and the Food and Drug Branch of CDPH to determine our compliance with the QSR and other regulations, and these inspections may include the manufacturing facilities of our third-party suppliers. Additionally, our Notified Body, the BSI, regularly inspects our manufacturing, design and operational facilities to ensure ongoing ISO 13485 compliance in order to maintain our CE mark. Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA or other regulatory bodies, which may include any of the following sanctions:

- warning letters, fines, injunctions, consent decrees and civil penalties;
- repair, replacement, refunds, recall or seizure of our products;
- operating restrictions, partial suspension or total shutdown of production;
- refusing our requests for 510(k) clearance or PMA approval of new products, new intended uses or modifications to existing products;
- withdrawing 510(k) clearance or PMA approvals that have already been granted; and
- criminal prosecution.

European Union

Our portfolio of products is regulated in the European Union as a medical device per the European Union Medical Devices Directive (Council Directive 93/42/EEC) (MDD). The MDD sets out the basic regulatory framework for medical devices in the European Union. The system of regulating medical devices operates by way of a certification for each medical device. Each certified device is marked with the CE mark which shows that the device has a Certificate de Conformité. There are national bodies known as Competent Authorities in each member state which oversee the implementation of the MDD within their jurisdiction. The means for achieving the requirements for the CE mark vary according to the nature of the device. Devices are classified in accordance with their perceived risks, similar to the United States system. The class of a product determines the conformity assessment required before the CE mark can be placed on a product. Conformity assessments for our products are carried out as required by the MDD. Each member state can appoint Notified Bodies within its jurisdiction. If a Notified Body of one member state has issued a Certificat de Conformité, the device can be sold throughout the European Union without further conformance tests being required in other member states. The CE mark is contingent upon continued compliance with the applicable regulations and the quality system requirements of the ISO 13485 standard. Our current CE mark is issued by BSI.

Health Insurance Portability and Accountability Act

The Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH), established federal protection for the privacy and security of health information. Under HIPAA, the United States Department of Health and Human Services (HHS), has issued regulations to protect the privacy and security of PHI used or disclosed by "Covered Entities," including certain healthcare providers, health plans and healthcare clearinghouses, and their respective "Business Associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. HIPAA also regulates standardization of data content, codes and formats used in healthcare transactions and standardization of identifiers for health plans and certain healthcare providers. The HIPAA privacy regulations protect medical records and other PHI by limiting their use and release, giving patients the right to access their medical records and limiting most disclosures of health information to the minimum amount necessary to accomplish an intended purpose. The HIPAA security standards require the adoption of administrative, physical and technical safeguards and the adoption of written security policies and procedures. In addition, HIPAA requires Covered Entities to execute Business Associate Agreements with their Business Associates and subcontractors, who provide services for or on behalf of Covered Entities. Business Associates have a corresponding obligation to maintain appropriate Business Associate Agreements under HIPAA. In addition, companies that would not otherwise be subject to HIPAA may become contractually obligated to follow HIPAA requirements through agreements with Covered Entities and Business Associates, and some of our customers may require us to agree to these provisions.

In addition, various states, such as California and Massachusetts, have implemented similar privacy laws and regulations, such as the California Confidentiality of Medical Information Act, that impose restrictive requirements regulating the use and disclosure of health information and other personally identifiable information. In addition to fines and penalties imposed upon violators, some of these state laws also afford private rights of action to individuals who believe their personal information has been misused. California's patient privacy laws, for example, provide for penalties of up to $250,000 and permit injured parties to sue for damages. The interplay of federal and state laws may be subject to varying interpretations by courts and government agencies, creating complex compliance issues and potentially exposing us to additional expense, adverse publicity and liability. The compliance requirements of these laws, including additional breach reporting requirements, and the penalties for violation vary widely, and new privacy and security laws in this area are evolving. Requirements of these laws and penalties for violations vary widely.

If we or our operations are found to be in violation of HIPAA, HITECH or their implementing regulations, and similar state laws, we may be subject to significant penalties, including civil, criminal and administrative penalties, fines, imprisonment and exclusion from participation in federal or state healthcare programs, and the curtailment or restructuring of our operations. In addition, HITECH created four new tiers of civil monetary penalties, amended

HIPAA to make civil and criminal penalties directly applicable to Business Associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.

U.S. Federal, State and Foreign Fraud and Abuse Laws

The federal and state governments have enacted, and actively enforce, a number of laws to address fraud and abuse in federal healthcare programs. Our business is subject to compliance with these laws.

Anti-Kickback Statutes

The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation.

The definition of "remuneration" has been broadly interpreted to include anything of value, including, for example, gifts, certain discounts, the furnishing of free supplies, equipment or services, credit arrangements, payment of cash and waivers of payments. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered businesses, the statute has been violated. Violations of the federal Anti-Kickback Statute may result in civil monetary penalties up to $100,000 for each violation, plus up to three times the remuneration involved. Violations can also result in criminal penalties, including criminal fines of up to $100,000 and imprisonment of up to ten years. Similarly, violations can result in exclusion from participation in government healthcare programs, including Medicare and Medicaid. Additionally, the intent standard under the federal Anti-Kickback Statute was amended by the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (Affordable Care Act) to a stricter standard such that a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Further, the Affordable Care Act codified case law that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (FCA).

There are a number of statutory exceptions and regulatory "safe harbors" protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance to offer protection. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy an applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the HHS Office of the Inspector General (OIG).

Many states have adopted laws similar to the federal Anti-Kickback Statute. Some of these state prohibitions apply to referral of recipients for healthcare products or services reimbursed by any source, not only government healthcare programs, and may apply to payments made directly by the patient.

Government officials have focused their enforcement efforts on the marketing of healthcare services and products, among other activities, and recently have brought cases against companies, and certain individual sales, marketing and executive personnel, for allegedly offering unlawful inducements to potential or existing customers in an attempt to procure their business.

Federal False Claims Laws

The federal false claims laws, including the FCA, imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The *qui tam* provisions of the FCA allow a private individual to bring actions on behalf of the federal government alleging that the defendant has violated the FCA and to share in any monetary recovery. In addition,

various states have enacted false claims laws analogous to the FCA, and many of these state laws apply where a claim is submitted to any third-party payor and not only a federal healthcare program.

When an entity is determined to have violated the FCA, it may be required to pay up to three times the actual damages sustained by the government, plus significant civil fines and penalties. As part of a settlement, the government may require the entity to enter into a corporate integrity agreement, which imposes certain compliance, certification and reporting obligations. There are many potential bases for liability under the FCA. Liability arises, primarily, when an entity knowingly submits, or causes another to submit, a false claim for reimbursement to the federal government. The federal government has used the FCA to assert liability on the basis of kickbacks, or in instances in which manufacturers have provided billing or coding advice to providers that the government considered to be inaccurate. In these cases, the manufacturer faces liability for "causing" a false claim. In addition, the federal government has prosecuted companies under the FCA in connection with off-label promotion of products. Our activities, including those relating to the reporting of discount and rebate information and other information affecting federal, state and third-party reimbursement of our products (such as our patient reimbursement support programs) and the sale and marketing of our products, may be subject to scrutiny under these laws.

While we are unaware of any current matters, we are unable to predict whether we will be subject to actions under the FCA or a similar state law, or the impact of such actions. However, the costs of defending such claims, as well as any sanctions imposed, could significantly affect our financial performance.

Civil Monetary Penalties

The Civil Monetary Penalty Act of 1981 imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal healthcare program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent, or offering or transferring remuneration to a federal healthcare beneficiary that a person knows or should know is likely to influence the beneficiary's decision to order or receive items or services reimbursable by the government from a particular provider or supplier.

Open Payments

The Physician Payments Sunshine Act (Open Payments), enacted as part of the Affordable Care Act, requires certain pharmaceutical, medical device and medical supply manufacturers covered by Medicare, Medicaid or the Children's Health Insurance Program to report annually to CMS: payments and transfers of value to physicians, certain other healthcare providers, teaching hospitals, and applicable manufacturers and group purchasing organizations, as well as to report annually ownership and investment interests held by physicians and their immediate family members. Failure to submit required information may result in civil monetary penalties of $11,052 per failure up to an aggregate of $165,786 per year (or up to an aggregate of $1.105 million per year for "knowing failures"), for all payments, transfers of value or ownership or investment interests that are not timely, accurately and completely reported in an annual submission, and may result in liability under other federal laws or regulations. We are subject to Open Payments and the information we disclose may lead to greater scrutiny, which may result in modifications to established practices and additional costs. Additionally, similar reporting requirements have also been enacted on the state level domestically, and an increasing number of countries worldwide either have adopted or are considering similar laws requiring transparency of interactions with healthcare professionals.

Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (FCPA) prohibits any United States individual or business from paying, offering or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring us to maintain books and records that accurately and

fairly reflect all transactions of the corporation, including international subsidiaries, if any, and to devise and maintain an adequate system of internal accounting controls for international operations.

International Laws

In Europe, various countries have adopted anti-bribery laws providing for severe consequences in the form of criminal penalties and significant fines for individuals or companies committing a bribery offense. Violations of these anti-bribery laws, or allegations of such violations, could have a negative impact on our business, results of operations and reputation.

For instance, in the United Kingdom, under the U.K. Bribery Act of 2010 (Bribery Act), a bribery occurs when a person offers, gives or promises to give a financial or other advantage to induce or reward another individual to improperly perform certain functions or activities, including any function of a public nature. Bribery of foreign public officials also falls within the scope of the Bribery Act. An individual found in violation of the U.K. Bribery Act of 2010, faces imprisonment of up to ten years. In addition, the individual can be subject to an unlimited fine, as can commercial organizations for failure to prevent bribery.

There are also international privacy laws that impose restrictions on the access, use and disclosure of health information. All of these laws may impact our business. Our failure to comply with these privacy laws or significant changes in the laws restricting our ability to obtain required patient information could significantly impact our business and our future business plans.

United States Centers for Medicare and Medicaid Services

Medicare is a federal program administered by CMS through fiscal intermediaries and carriers. Available to individuals age 65 or over, and certain other individuals, the Medicare program provides, among other things, healthcare benefits that cover, within prescribed limits, the major costs of most medically necessary care for such individuals, subject to certain deductibles and copayments.

CMS has established guidelines for the coverage and reimbursement of certain products and procedures by Medicare. In general, in order to be reimbursed by Medicare, a healthcare procedure furnished to a Medicare beneficiary must be reasonable and necessary for the diagnosis or treatment of an illness or injury, or to improve the functioning of a malformed body part. The methodology for determining coverage status and the amount of Medicare reimbursement varies based upon, among other factors, the setting in which a Medicare beneficiary received healthcare products and services. Any changes in federal legislation, regulations and policy affecting CMS coverage and reimbursement relative to the procedure using our products could have a material effect on our performance. While no NCD or LCD exists for endobronchial valves currently, CMS could develop an NCD, or one or more Medicare contractors could develop an LCD that either restricts coverage or restricts the patient population deemed appropriate for the treatment.

CMS also administers the Medicaid program, a cooperative federal/state program that provides medical assistance benefits to qualifying low income and medically needy persons. State participation in Medicaid is optional, and each state is given discretion in developing and administering its own Medicaid program, subject to certain federal requirements pertaining to payment levels, eligibility criteria and minimum categories of services. The coverage, method and level of reimbursement vary from state to state and is subject to each state’s budget restraints. Changes to the availability of coverage, method or level of reimbursement for relevant procedures may affect future revenue negatively if reimbursement amounts are decreased or discontinued.

All CMS programs are subject to statutory and regulatory changes, retroactive and prospective rate adjustments, administrative rulings, interpretations of policy, intermediary determinations, and government funding restrictions, all of which may materially increase or decrease the rate of program payments to healthcare facilities and other healthcare providers, including those paid for Zephyr Valve treatments.

United States Health Reform

Changes in healthcare policy could increase our costs and subject us to additional regulatory requirements that may interrupt commercialization of our current and future products. Changes in healthcare policy could increase our costs, decrease our revenue and impact sales of and reimbursement for our current and future products. The Affordable Care Act substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacts our industry. The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality or expanding access. Current and future legislative proposals to further reform healthcare or reduce healthcare costs may limit coverage of or lower reimbursement for the procedures associated with the use of our products. The cost containment measures that payors and providers are instituting and the effect of any healthcare reform initiative implemented in the future could impact our revenue from the sale of our products.

The implementation of the Affordable Care Act in the United States, for example, has changed healthcare financing and delivery by both governmental and private insurers substantially, and affected medical device manufacturers significantly. The Affordable Care Act imposed, among other things, a 2.3% federal excise tax, with limited exceptions, on any entity that manufactures or imports Class I, II and III medical devices offered for sale in the United States that began on January 1, 2013. Through a series of legislative amendments, the tax was suspended for 2016 through 2019. Absent further legislative action, the device excise tax will be reinstated on medical device sales starting January 1, 2020. The Affordable Care Act also provided incentives to programs that increase the federal government’s comparative effectiveness research, and implemented payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the coordination, quality and efficiency of certain healthcare services through bundled payment models. Additionally, the Affordable Care Act has expanded eligibility criteria for Medicaid programs and created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. We do not yet know the full impact that the Affordable Care Act will have on our business. Some of the provisions of the Affordable Care Act have yet to be implemented, and there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the Affordable Care Act. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the Affordable Care Act. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the Affordable Care Act such as removing penalties, starting January 1, 2019, for not complying with the Affordable Care Act’s individual mandate to carry health insurance and delaying the implementation of certain fees mandated by the Affordable Care Act. On December 14, 2018, a Texas U.S. District Court Judge ruled that the Affordable Care Act is unconstitutional in its entirety because the individual mandate was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017. While the Texas U.S. District Court Judge, as well as the Trump administration and CMS, have stated that the ruling will have no immediate effect pending appeal of the decision, it is unclear how this decision, subsequent appeals and other efforts to repeal and replace the Affordable Care Act will impact the Affordable Care Act and our business.

In addition, other legislative changes have been proposed and adopted since the Affordable Care Act was enacted. For example, the Budget Control Act of 2011, among other things, included reductions to CMS payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2029 unless additional Congressional action is taken. Additionally, the American Taxpayer Relief Act of 2012, among other things, reduced CMS payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

We believe that there will continue to be proposals by legislators at both the federal and state levels, regulators and third-party payors to reduce costs while expanding individual healthcare benefits. Certain of these changes could impose additional limitations on the rates we will be able to charge for our current and future products or the

amounts of reimbursement available for our current and future products from governmental agencies or third-party payors. Current and future healthcare reform legislation and policies could have a material adverse effect on our business and financial condition.

Employees

As of December 31, 2019, we had 180 full-time employees. We believe that the success of our business will depend, in part, on our ability to attract and retain qualified personnel. None of our employees are represented by a labor union or are a party to a collective bargaining agreement and we believe that we have good relations with our employees.

Facilities

We currently lease approximately 25,000 square feet for our corporate headquarters located in Redwood City, California under a lease agreement that terminates in 2025. This facility supports production and distribution operations, including manufacturing, quality control, raw material and finished goods storage. We also lease office space in Neuchâtel, Switzerland. We believe that these facilities are sufficient to meet our current and anticipated needs in the near term and that additional space can be obtained on commercially reasonable terms as needed.

Legal Proceedings

From time to time we may become involved in legal proceedings or investigations, which could have an adverse impact on our reputation, business and financial condition and divert the attention of our management from the operation of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. We may from time to time receive letters from third parties alleging patent infringement, violation of employment practices or trademark infringement, and we may in the future participate in litigation to defend ourselves. We cannot predict the results of any such disputes, and despite the potential outcomes, the existence thereof may have an adverse material impact on us due to diversion of management time and attention as well as the financial costs related to resolving such disputes.

Executive Officers and Directors

The following table sets forth information concerning our executive officers and directors as of December 31, 2019:

Name	Age	Position(s)
Executive Officers		
Glendon E. French	57	President, Chief Executive Officer and Director
Derrick Sung, Ph.D.	47	Chief Financial Officer
Geoffrey Beran Rose	46	Chief Commercial Officer
Non-Employee Directors		
Charles Chon	45	Director
Richard Ferrari	66	Director
Daniel Florin(4)	55	Director
Staffan Lindstrand	57	Director
Dana G. Mead, Jr.	60	Director and Chairperson of the Board
Michael Matly, M.D.	38	Director
Rodney Perkins, M.D.	83	Founder and Director
Stephen Salmon	59	Director
Oern Stuge, M.D.	65	Director

(1) Member of the audit committee
(2) Member of the compensation committee
(3) Member of the nominating and corporate governance committee
(4) Mr. Florin was appointed as a director on January 17, 2020.

Executive Officers

Glendon E. French has served as our President, Chief Executive Officer and as a member of our board of directors since December 2014. From January 2014 to November 2014, Mr. French served as Chief Executive Officer and as a director of ApniCure, a medical device company. From October 2010 to December 2012, Mr. French served as President, Pulmonary Endoscopy for Boston Scientific Corporation, a medical device company. From December 2003 to October 2010, Mr. French served as President and Chief Executive Officer and as a director of Asthmatx, Inc., a medical device company. Mr. French serves as the Executive Chairman of the board of directors of Levita Magnetics International Corp., a medical device company. Mr. French holds a B.A. in History from Dartmouth College and an M.B.A. from the Wharton School at the University of Pennsylvania. We believe that Mr. French is qualified to serve as a member of our board of directors because of his extensive leadership experience and knowledge of the medical device industry.

Derrick Sung, Ph.D. has served as our Chief Financial Officer since May 2019. From May 2015 to May 2019, Dr. Sung served as the Executive Vice President of Strategy and Corporate Development for iRhythm Technologies, Inc., a digital healthcare and medical technology company. From February 2008 to April 2015, Dr. Sung was the senior equity research analyst covering the medical devices sector for Sanford C. Bernstein & Co., LLC, a subsidiary of AllianceBernstein L.P. From 2004 to 2008, he served as Director of Marketing and Business Development in the Neuromodulation division of Boston Scientific Corporation. From 2000 to 2004, Dr. Sung was a management consultant at The Boston Consulting Group, a business consulting firm. Dr. Sung holds a Ph.D. in Bioengineering from U.C. San Diego, an M.B.A. from San Diego State University and a B.S. in Mechanical Engineering from Stanford University.

Geoffrey Beran Rose has served as our Chief Commercial Officer since January 2020. From December 2014 to January 2020, Mr. Rose served as our Vice President, Marketing and Business Development. From August 2013 to December 2014, Mr. Rose served as Global Group Marketing Director for Boston Scientific Corporation. From August 2006 to August 2013, Mr. Rose served as a director of strategy within research and development and clinical organizations of Boston Scientific Corporation. Mr. Rose holds a B.A. from Yale University and an M.B.A. from the MIT Sloan School of Management.

Non-Employee Directors

Charles Chon has served on our board of directors since April 2019. Mr. Chon is a Partner and Managing Director of Ally Bridge Group (ABG), a healthcare-focused investment group, where Mr. Chon leads the group's investing efforts in medical technologies. Before joining ABG in 2013, Mr. Chon was in public equity research for more than 13 years on both the sell-side and buy-side covering healthcare and, more specifically, medical technologies. This includes experiences with Janchor Partners Limited, a long-short fund based in Hong Kong, from 2012 to 2013, Stifel Nicolaus & Co., a global investment bank and financial services company, from 2010 to 2012, and Goldman Sachs Group, Inc., another global investment bank and financial services company, from 2004 to 2009. Mr. Chon holds a CFA designation, and an M.B.A. in healthcare management from Boston University and a B.A. in Chemistry from Amherst College. We believe that Mr. Chon is qualified to serve as a member of our board of directors because of his extensive experience in public equities research and working with medical technology companies.

Richard Ferrari has served on our board of directors since March 2007. Mr. Ferrari is the Co-Founder and Managing Director of De Novo Ventures, a healthcare investment firm dedicated to medical devices and bio-technology. Mr. Ferrari also serves as a faculty member of the Stanford Biodesign Emerging Entrepreneurs Forum, as well as a board member for the Stanford Coulter Foundation for Translational Medicine. From October 1995 to May 1999, Mr. Ferrari co-founded and served as the Chief Executive Officer of CardioThoracic Systems, Inc., a surgery medical technology and device company. From January 1990 to June 1995, Mr. Ferrari served as the CEO of Cardiovascular Imaging Systems, a developer of ultrasound imaging. Mr. Ferrari holds a B.S. from Ashland University and an M.B.A. from the University of South Florida. We believe that Mr. Ferrari is qualified to serve as a member of our board of directors because of his technical knowledge, extensive leadership experience at medical technology companies and the historical knowledge and continuity he brings to our board of directors.

Daniel Florin has served as a member our board of directors since January 2020. Since July 2019, Mr. Florin has served as Executive Vice President of Zimmer Biomet Holdings Inc., a medical device company. From June 2015 to July 2019, Mr. Florin served as Zimmer Biomet's Executive Vice President and Chief Financial Officer. From July 2017 to December 2017, Mr. Florin served as Zimmer Biomet's Interim Chief Executive Officer. From June 2007 to June 2015, Mr. Florin served as Senior Vice President and Chief Financial Officer at Biomet, Inc. (prior to Biomet's merger with Zimmer). From January 2001 to May 2007, Mr. Florin served as Vice President and Corporate Controller of Boston Scientific Corporation. Mr. Florin has served as a board member at AtriCure, Inc. since December 2019. Mr. Florin holds a B.A. with a concentration in Accounting from the University of Notre Dame and an M.B.A. from Boston University. We believe that Mr. Florin is qualified to serve as a member of our board of directors because of his extensive experience in the medical device industry.

Staffan Lindstrand has served on our board of directors since February 2010. Mr. Lindstrand is a Partner of HealthCap, a venture capital firm investing in life science companies. Mr. Lindstrand currently serves on the boards of directors of Orexo AB, a Nasdaq Stockholm-listed specialty pharmaceutical company, Doctrin AB, a healthcare technology platform, and Pactumize, a legal technology company, as well as other private company boards. Mr. Lindstrand also previously served on the board of Aerocrine AB, a previously Nasdaq Stockholm-listed medical device company. From December 1986 to September 1997, Mr. Lindstrand served as a Vice President at ABB Aros Securities AB in Sweden, a brokerage and financial advisory firm. Mr. Lindstrand holds an M.Sc. in Engineering from the KTH Royal Institute of Technology of Stockholm. We believe that Mr. Lindstrand is qualified to serve as a member of our board of directors because of his experience with medical device and life science companies, his service on public and private company boards and the historical knowledge and continuity he brings to our board of directors.

Dana G. Mead, Jr. has served as a member of our board of directors since February 2010 and has served as our Chairman since October 2019. Since May 2019, Mr. Mead has served as the Chief Executive Officer, President and director of HeartFlow, Inc., a medical technology company. From November 2016 to May 2019, Mr. Mead served as President and Chief Executive Officer of Beaver-Visitec International, Inc., a surgical device developer and manufacturer. From June 2005 to November 2016, Mr. Mead served as a partner at Kleiner Perkins Caufield & Byers, a venture capital investment firm. In addition to serving on our board of directors and the board of HeartFlow, Inc., Mr. Mead has served on the board of directors of Inspire Medical Systems since July 2008 and the board of directors of Intersect ENT, Inc. since January 2006, where he serves on its audit and compensation committees. Mr. Mead holds a B.A. from Lafayette College and an M.B.A. from the University of Southern California. We believe that Mr. Mead is qualified to serve as a member of our board of directors because of his service on other medical technology company boards, his broad experience in the healthcare industry and the historical knowledge and continuity he brings to our board of directors.

Michael Matly, M.D. has served on our board of directors since March 2016. Dr. Matly is a Managing Director at Montreux Growth Partners, a private investment firm focused on health services and technology companies. From September 2009 to June 2012, Dr. Matly led Business Development and New Ventures at the Mayo Clinic Center for Innovation, a center within The Mayo Clinic, a nonprofit academic medical center. Dr. Matly holds an M.D. from the Mayo Clinic, an M.B.A. from Harvard Business School, and a B.S. from Cornell University. We believe that Dr. Matly is qualified to serve as a member of our board of directors because of his extensive medical knowledge, his experience in the medical technology field and his experience serving on the board of public and private companies.

Rodney Perkins, M.D. is our founder and has served on our board of directors since March 1996. Dr. Perkins previously served as our Chief Executive Officer from March 1996 to December 1999, October 2000 to September 2001, and July 2013 to June 2014; Chairman of our board of directors from June 1996 until October 2019; Chief Financial Officer from March 1996 to November 2003; and President from March 1996 to December 1999, and March 2006 to July 2009. Dr. Perkins is an internationally known otologic surgeon who has participated actively in the development of multiple successful medical device companies. He is the founder of the California Ear Institute and a Professor of Surgery at Stanford University. Dr. Perkins holds an M.D. from The Indiana University and completed his surgical residency at The Stanford University School of Medicine. We believe that Dr. Perkins is qualified to serve as a member of our board of directors because of his extensive experience with medical technology companies, his service on public and private company boards and the historical knowledge and continuity he brings to our board of directors.

Stephen Salmon has served as a member our board of directors since June 2007. Since June 2005, Mr. Salmon has served as a partner at LVP Life Science Ventures III, L.P., a private investment fund focused on healthcare companies. Mr. Salmon previously served as the Vice President, Research & Development, at Boston Scientific Corporation and held executive positions within several medical device companies. Mr. Salmon has authored or co-authored 34 U.S. patents. Mr. Salmon holds a B.S. in Chemical Engineering from the University of Maine. We believe Mr. Salmon is qualified to serve as a member of our board of directors because of his extensive experience working for and advising medical device research and development companies and the historical knowledge and continuity he brings to our board of directors.

Oern R. Stuge, M.D. has served as a member of our board of directors since October 2014. Since October 2013, Dr. Stuge has served as Executive Chairman of our subsidiary, PulmonX International Sàrl. Since January 2011, Dr. Stuge has been Chairman of Orsco Lifesciences AG, a management firm specializing in medical technology companies. Dr. Stuge previously served as our interim Chief Executive Officer from June 2014 to December 2014. From May 1998 to December 2009, Dr. Stuge served in various positions, including as Senior Vice-President, at Medtronic, Inc., a medical device company. Dr. Stuge currently serves on the board of GI Dynamics, Inc., a publicly traded medical device company. Dr. Stuge is also currently Chairman of Mainstay Medical Limited, a Euronext Paris-listed and Irish Stock Exchange-listed medical device company and Lumenis Limited, formerly a Nasdaq-listed medical company. Dr. Stuge holds an M.D. from the University of Oslo, Norway, an M.B.A. from IMD and an INSEAD Certification in Corporate Governance. We believe that Dr. Stuge is qualified to serve as a member of our

board of directors because of his extensive experience in sales, management and operations in the medical device industry and his service on the boards of public and private medical device and technology companies.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Board Composition and Election of Directors

Our board of directors currently consists of ten members. Each director is currently elected to the board of directors for a one-year term, to serve until the election and qualification of a successor director at our annual meeting of stockholders, or until the director's earlier removal, resignation or death.

Certain of our directors currently serve on the board of directors pursuant to the voting provisions of a voting agreement between us and several of our stockholders. Under the terms of this voting agreement, the stockholders who are party to the voting agreement have agreed to vote their respective shares so as to elect: (1) one director to be designated by Montreux Equity Partners, who is currently Dr. Matly; (2) one director to be designated by De Novo Ventures, who is currently Mr. Ferrari; (3) one director to be designated by Latterell Venture Partners, who is currently Mr. Salmon; (4) one director to be designated by HealthCap V L.P., who is currently Mr. Lindstrand; (5) one director designated by KPCB Holdings, Inc., who is currently Mr. Mead; (6) one director designated by ABG-Pulmonx Limited, who is currently Mr. Chon; (7) one director to be our current Chief Executive Officer, who is currently Mr. French; (8) one director elected by the holders of our common stock, who is currently Dr. Perkins; and (9) two directors who are industry experts designated by the other directors, who are currently Dr. Stuge and Mr. Florin. This agreement will terminate upon the closing of this offering, after which there will be no further contractual obligations regarding the election of our directors.

Classified Board of Directors

In accordance with our amended and restated certificate of incorporation, which will become effective in connection with the closing of this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- Class I, which will consist of , whose term will expire at our first annual meeting of stockholders to be held after the closing of this offering;
- Class II, which will consist of , whose term will expire at our second annual meeting of stockholders to be held after the closing of this offering; and
- Class III, which will consist of , whose term will expire at our third annual meeting of stockholders to be held after the closing of this offering.

Our amended and restated bylaws, which will become effective in connection with the closing of this offering, will provide that the authorized number of directors may be changed only by resolution approved by a majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control. See the section entitled "Description of Capital Stock—Anti-Takeover Provisions—Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation and Bylaws to be in Effect Upon the Closing of this Offering."

Director Independence

Our board of directors has undertaken a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning such director's background, employment and affiliations, including family relationships, our board of directors determined that , representing of our ten directors following the closing of this offering, are "independent directors" as defined under the listing standards of the Nasdaq Global Market. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and the transactions involving them described in "Certain Relationships and Related Party Transactions."

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. Each of the audit committee, the compensation committee and the nominating and corporate governance committee will operate under a written charter that will be approved by our board of directors in connection with this offering. From time to time, our board of directors may establish other committees to facilitate the management of our business.

Audit Committee

Our audit committee consists of three directors, , and . Our board of directors has determined that each of our audit committee members satisfies the independence requirements for audit committee members under the listing standards of the Nasdaq Global Market and Rule 10A-3 of the Exchange Act. Each member of our audit committee meets the financial literacy requirements of the listing standards of the Nasdaq Global Market. is the chairperson of the audit committee and our board of directors has determined that is an audit committee "financial expert" as defined by Item 407(d) of Regulation S-K under the Securities Act of 1933, as amended (Securities Act). The principal duties and responsibilities of our audit committee include, among other things:

- selecting a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- helping to ensure the independence and performance of the independent registered public accounting firm;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on risk assessment and risk management;
- reviewing related party transactions;
- obtaining and reviewing a report by the independent registered public accounting firm at least annually, that describes its internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our audit committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Global Market.

Compensation Committee

Our compensation committee consists of directors, , and , each of whom our board of directors has determined is a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act. is the chairperson of the compensation committee. The composition of our compensation committee meets the requirements for independence under current listing standards of the Nasdaq Global Market and current SEC rules and regulations. The principal duties and responsibilities of our compensation committee include, among other things:

- reviewing and approving, or recommending that our board of directors approve, the compensation of our executive officers, including evaluating the performance of our chief executive officer and, with his assistance, that of our other executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- reviewing and approving, or recommending that our board of directors approve, the terms of compensatory arrangements with our executive officers;
- administering our equity and non-equity incentive plans;
- reviewing and approving, or recommending that our board of directors approve, incentive compensation and equity plans; and
- reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy.

Our compensation committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Global Market.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of directors, , and . is the chairperson of the nominating and corporate governance committee. The composition of our nominating and corporate governance committee meets the requirements for independence under current listing standards of the Nasdaq Global Market and current SEC rules and regulations. The nominating and corporate governance committee's responsibilities include, among other things:

- identifying, evaluating and selecting, or recommending that our board of directors approve, nominees for election to our board of directors and its committees;
- evaluating the performance of our board of directors and of individual directors;
- considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees;
- reviewing developments in corporate governance practices;
- evaluating the adequacy of our corporate governance practices and reporting;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and

- overseeing an annual evaluation of the board's performance.

Our nominating and corporate governance committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the Nasdaq Global Market.

Code of Business Conduct and Ethics

In connection with this offering, we intend to adopt a Code of Business Conduct and Ethics (Code of Conduct) applicable to all of our employees, executive officers, and directors. Following the closing of this offering, the Code of Conduct will be available on our website. The nominating and corporate governance committee of our board of directors will be responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements with respect to our executive officers and directors, will be disclosed on our website.

Compensation Committee Interlocks and Insider Participation

None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.

Non-Employee Director Compensation

The following table sets forth information regarding the compensation earned for service on our board of directors during the year ended December 31, 2019 by our non-employee directors. Glendon E. French, our Chief Executive Officer, is also a member of our board of directors, but did not receive any additional compensation for service as a director. Mr. French's compensation as an executive officer is set forth below under "Executive Compensation—2019 Summary Compensation Table."

Name[1]	Fees Earned or Paid in Cash ($)	Option Awards ($)[2]	All Other Compensation ($)	Total ($)
Charles Chon	$ —	$ —	$ —	$ —
Richard Ferrari	—	—	—	—
Daniel Florin	—	13,548	12,500[3]	26,048
Staffan Lindstrand	—	—	—	—
Dana G. Mead, Jr.	15,000	13,548	—	28,548
Michael Matly, M.D.	—	—	—	—
Rodney Perkins, M.D.	—	14,994	—	14,994
Stephen Salmon	—	—	—	—
Oern Stuge, M.D.	—	2,269	72,075[4]	74,344

(1) All amounts presented in the Non-Employee Director Compensation table are expressed in U.S. dollars, except as listed in footnote 4 below.
(2) Amounts shown in this column do not reflect dollar amounts actually received by our non-employee directors. Instead, these amounts reflect the aggregate grant date fair value of each stock option granted in 2018, computed in accordance with the provisions of FASB ASC Topic 718. Methodology used in the calculation of these amounts are included in Note 11 to our consolidated financial statements included in this prospectus. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Our non-employee directors will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options.
(3) Consists of $12,500 paid to Mr. Florin under the terms of a consulting agreement, which was terminated on his election to our board.
(4) Consists of: (i) $12,056 paid to Dr. Stuge for his services as Executive Chairman of PulmonX International Sàrl and (ii) $60,020 paid to Orsco Life Sciences AG, a consulting entity owned by Dr. Stuge, for consulting services rendered to PulmonX International Sârl. All amounts payable to Dr. Stuge in 2019 were paid in Swiss francs. The exchange rate used for the purpose of the Non-Employee Director Compensation Table was as follows: (i) for payments in January 2019, 0.9905 Swiss francs to 1 U.S. dollar, (ii) for payments in February

2019, 0.9934 Swiss francs to 1 U.S. dollar, (iii) for payments in March 2019, 1.0003 Swiss francs to 1 U.S. dollar, (iv) for payments in April 2019, 0.9955 Swiss francs to 1 U.S. dollar, (v) for payments in May, 1.0202 Swiss francs to 1 U.S. dollar, (vi) for payments in June, 1.0068 Swiss francs to 1 U.S. dollar, (vii) for payments in July 2019, 0.9781 Swiss francs to 1 U.S. dollar, (viii) for payments in August 2019, 0.9909 Swiss francs to 1 U.S. dollar, (ix) for payments in September 2019, 0.9837 Swiss francs to 1 U.S. dollar, (x) for October, 0.9928 Swiss francs to 1 U.S. dollar, (xi) for payments in November 2019, 0.9947 Swiss francs to 1 U.S. dollar and (xii) for payments in December 2019, 0.9990 Swiss francs to 1 U.S. dollar,based on the average exchange rates published by the Federal Reserve Bank in 2019.

We currently reimburse our directors for their reasonable out-of-pocket expenses in connection with attending board of directors and committee meetings. From time to time, we have granted stock options to certain of our non-employee directors as compensation for their services.

In June 2019, we granted Dr. Stuge an option to purchase 30,000 shares of common stock with an exercise price of $0.14 per share, vesting monthly over one year.

In June 2019, we granted Dr. Perkins an option to purchase 200,000 shares of common stock with an exercise price of $0.14 per share, of which 100,000 were fully vested as of the date of grant and 100,000 vest monthly over one year.

In October 2019, we granted Mr. Florin an option to purchase 60,000 shares of common stock with an exercise price of $0.21 per share, vesting monthly over one year, which vesting will terminate upon the closing of this offering.

In October 2019, we granted Mr. Mead an option to purchase 60,000 shares of common stock with an exercise price of $0.21 per share, vesting monthly over one year, which vesting will terminate upon the closing of this offering.

Commencing in October 2019 and until the closing of this offering, we pay Mr. Mead $5,000 per month for service as Chairman of our board of directors. Commencing on his election to our Board in January 2020 and until the closing of this offering, we pay Mr. Florin $5,000 per month for service as a member of our board of directors.

Non-Employee Director Compensation Policy

We intend to adopt a non-employee director compensation policy, pursuant to which our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors.

EXECUTIVE COMPENSATION

Our named executive officers, consisting of our principal executive officer and our two other most highly compensated officers for our fiscal year ended December 31, 2019, were:

- Glendon E. French, Chief Executive Officer and Director;
- Derrick Sung, Ph.D., Chief Financial Officer; and
- Geoffrey Beran Rose, Chief Commercial Officer.

Summary Compensation Table

The following table sets forth all of the compensation awarded to, or earned by or paid to our named executive officers during 2019.

Name and Principal Position	Salary	Bonus	Option Awards[1]	Non-Equity Incentive Plan Compensation[2]	All Other Compensation[3]	Total
Glendon E. French	$ 412,000		$ 546,326	$ 152,110	$ 642	$ 1,111,078
Chief Executive Officer						
Derrick Sung, Ph.D.	196,591		186,600	45,363	348	428,902
Chief Financial Officer						
Geoffrey Beran Rose	272,600		137,163	62,902	642	473,307
Chief Commercial Officer						

(1) These columns reflect the aggregate grant date fair value of options without regard to forfeitures granted during the year measured pursuant to Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC 718). Assumptions used in the calculation of these amounts are included in Note 11 to our Consolidated Financial Statements included in this prospectus. Our named executive officers will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options.

(2) Represents payments upon the achievement of 2019 corporate goals as well as individual objectives, which were paid in January 2020. Our corporate goals included revenue growth, reimbursement progress and clinical and regulatory milestones.

(3) Amounts reported represent life insurance premiums paid by us on behalf of the named executive officer.

Outstanding Equity Awards as of December 31, 2019

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2019. All awards were granted under our 2010 Stock Plan. See "—Employment, Severance, and Change in Control Agreements" for a description of vesting acceleration applicable to stock options held by our named executive officers.

	Option Awards					
Name	Grant Date	Vesting Commencement Date	Number of Securities Underlying Exercisable Options	Number of Securities Underlying Unexercisable Options	Option Exercise Price	Option Expiration Date
Glendon E. French	2/15/2015	12/10/2014	7,094,554(1)(2)	—	$0.14	2/14/2025
	2/15/2015	12/10/2014	644,960(2)(3)	—	0.14	2/14/2025
	12/2/2015	12/10/2014	938,655(1)(2)	—	0.15	12/1/2025
	12/2/2015	12/10/2014	111,306(2)(3)	—	0.15	12/1/2025
	6/1/2016	6/1/2016	833,047(2)(4)	—	0.15	5/31/2026
	6/1/2016	6/1/2016	75,731(2)(3)	—	0.15	5/31/2026
	2/6/2017	2/6/2017	413,043(2)(4)	—	0.13	2/5/2027
	2/6/2017	2/6/2017	37,550(2)(3)	—	0.13	2/5/2027
	10/21/2019	10/2/2019	2,350,000(2)(4)	—	0.21	10/20/2029
Derrick Sung, Ph.D.	6/27/2019	(5)	762,199(2)(5)	—	0.14	6/26/2029
Geoffrey Beran Rose	2/15/2015	12/16/2014	714,285(1)(2)	—	0.14	2/14/2025
	12/2/2015	12/16/2014	222,612(1)(2)	—	0.15	12/1/2025
	6/1/2016	12/16/2014	151,463(1)(2)	—	0.15	5/31/2026
	2/6/2017	12/16/2014	75,099(1)(2)	—	0.13	2/5/2027
	10/21/2019	10/2/2019	590,000(2)(6)	—	0.21	10/20/2029

(1) 1/4th of the total shares subject to this option will vest one year after the vesting commencement date and the balance of the shares subject to this option will vest in a series of thirty-six successive equal monthly installments from the first anniversary of the vesting commencement date, subject to continuous service through each such date. As of December 31, 2019, all of the shares are vested.

(2) This option is early exercisable and to the extent any of such shares are unvested as of a given date, any purchased shares will remain subject to a right of repurchase by the Company upon the termination of the service of the named executive officer.

(3) 100% of the total shares subject to this option shall accelerate and become fully vested upon action of the Board or a Change of Control (as defined in that certain Executive Employment Agreement by and between the Company and Mr. French, dated December 10, 2014) that represents an enterprise value for the Company that is at least $500 million. As of December 31, 2019, no shares are vested. In February 2020 the Board determined to accelerate the vesting of this option in full.

(4) 1/48th of the total shares subject to this option will vest monthly measured from the vesting commencement date, subject to continuous service through each such date. As of December 31, 2019, 728,916, 292,572 and 97,916 shares are vested, respectively.

(5) This option shall commence vesting on the earlier of (i) May 6, 2020 or (ii) the closing of the Company's initial public offering ("IPO") and will vest monthly over three years (1/36th per month). If however on May 6, 2020 the Company has not closed its IPO and the Company is in bona fide discussions regarding the sale of the Company (such determination of bona fide discussions to be made by the Board of Directors in good faith), then this option shall terminate and not vest in any part assuming those discussions result in the sale of the Company. However, if the bona fide discussions regarding the sale of the Company come to a clear end (such determination to be made by the Board of Directors in good faith) or extend more than 180 days beyond May 6, 2020 without the sale of the Company then the Option will commence vesting back on May 6, 2020 and will vest monthly over three years (1/36 per month). As of December 31, 2019, no shares are vested.

(6) 1/48th of the total shares subject to this option will vest monthly measured from the vesting commencement date, subject to continuous service through each such date. As of December 31, 2019, 24,583 shares are vested.

Emerging Growth Company Status

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). As an emerging growth company we will be exempt from certain requirements related to executive compensation,

including, but not limited to, the requirements to hold a nonbinding advisory vote on executive compensation and to provide information relating to the ratio of total compensation of our Chief Executive Officer to the median of the annual total compensation of all of our employees, each as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Employment, Severance, and Change in Control Agreements

Employment Agreement with Mr. French

We entered into an employment agreement with Mr. French in December 2014. The agreement provides for an initial base salary of $375,000 and target annual bonus of 40% of base salary. More current information regarding Mr. French's compensation is set forth in the Summary Compensation Table above. Mr. French's annual base salary as of December 31, 2019 was $412,000. The agreement also provides for certain option awards, each of which has previously been granted and is described in more detail above in the chart entitled "Outstanding Equity Awards as of December 31, 2019." If Mr. French's employment is terminated without cause (as defined in the agreement) or he resigns due to a significant reduction in duties, position or responsibilities, a 10% reduction in salary or a forced relocation more than 30 miles, then, subject to executing a release of claims and complying with 12-month non-solicit and non-compete covenants, Mr. French will receive 12 months of salary continuation and COBRA premium reimbursements. If the termination occurs within one month prior to or 12 months following a change of control (as defined in the agreement), any stock options then held by him will become fully vested and exercisable.

Offer Letter with Dr. Sung

We entered into an offer letter with Dr. Sung in March 2019. The letter provides for an initial base salary of $300,000 and target bonus of 25% of base salary. The letter also provides for certain option awards, each of which has previously been granted and is described in more detail above in the chart entitled "Outstanding Equity Awards as of December 31, 2019."

Offer Letter with Mr. Rose

We entered into an offer letter with Mr. Rose in December 2014. The letter provides for an initial base salary of $240,000 and target bonus of 25% of base salary. Mr. Rose's annual base salary as of December 31, 2019 was $272,600. The letter also provides for certain option awards, each of which has previously been granted and is described in more detail above in the chart entitled "Outstanding Equity Awards as of December 31, 2019."

Annual Bonus Plan

Our named executive officers participate in our Annual Bonus Plan for Non-Sales Employees, pursuant to which a bonus payment may be earned based on the extent to which annual performance goals set by the Compensation Committee or the Board of Directors are met. Bonuses are paid during the first quarter of the year following the performance year. Annual bonus amounts paid with respect to 2019 are set forth in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table.

Employee Benefit Plans

Our named executive officers participate in our health and welfare plans on the same basis as other employees.

Our named executive officers are also eligible to participate in our 401(k) plan on the same basis as other employees. Eligible employees are able to defer compensation pursuant to the terms of the 401(k) plan up to certain limits imposed by the Code. We have the ability to make matching and discretionary contributions to the 401(k) plan but have not done so to date. Employees are immediately and fully vested in their own contributions. The 401(k) plan is intended to be qualified under Section 401(a) of the Code, with the related trust intended to be tax exempt under Section 501(a) of the Code.

Pension Benefits

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during 2019.

Nonqualified Deferred Compensation

Our named executive officers did not participate in, or earn any benefits under, a non-qualified deferred compensation plan sponsored by us during 2019.

Equity Incentive Plans

2020 Equity Incentive Plan

We expect that our board of directors will adopt, and our stockholders will approve prior to the closing of this offering, our 2020 Equity Incentive Plan (2020 Plan). Our 2020 Plan will become effective on the date of the underwriting agreement related to this offering. The 2020 Plan came into existence upon its adoption by our board of directors, but no grants will be made under the 2020 Plan prior to its effectiveness. Once the 2020 Plan is effective, no further grants will be made under the 2010 Plan.

Awards. Our 2020 Plan provides for the grant of incentive stock options (ISOs) within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (Code) to employees, including employees of any parent or subsidiary, and for the grant of nonstatutory stock options (NSOs), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of awards to employees, directors and consultants, including employees and consultants of our affiliates.

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2020 Plan after it becomes effective will not exceed shares of our common stock. In addition, the number of shares of our common stock reserved for issuance under our 2020 Plan will automatically increase on January 1 of each calendar year, starting on January 1, 2021 through January 1, 2030, in an amount equal to (i) % of the total number of shares of our common stock outstanding on December 31 of the fiscal year before the date of each automatic increase or (ii) a lesser number of shares determined by our board of directors prior to the applicable January 1. The maximum number of shares of our common stock that may be issued on the exercise of ISOs under our 2020 Plan is shares.

Shares subject to awards granted under our 2020 Plan that expire or terminate without being exercised in full or that are paid out in cash rather than in shares do not reduce the number of shares available for issuance under our 2020 Plan. Shares withheld under an award to satisfy the exercise, strike or purchase price of an award or to satisfy a tax withholding obligation do not reduce the number of shares available for issuance under our 2020 Plan. If any shares of our common stock issued pursuant to an award are forfeited back to or repurchased or reacquired by us (1) because of a failure to meet a contingency or condition required for the vesting of such shares, (2) to satisfy the exercise, strike or purchase price of an award or (3) to satisfy a tax withholding obligation in connection with an award, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under the 2020 Plan. Any shares previously issued which are reacquired in satisfaction of tax withholding obligations or as consideration for the exercise or purchase price of an award will again become available for issuance under the 2020 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2020 Plan and is referred to as the "plan administrator" herein. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than officers) to receive specified awards and (2) determine the number of shares subject to such awards. Under our 2020 Plan, our board of directors has the authority to determine award recipients, grant dates, the numbers and types of awards to be granted, the applicable fair market value, and the provisions of each award, including the period of exercisability and the vesting schedule applicable to an award.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2020 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2020 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2020 Plan, up to a maximum of 10 years. Unless the terms of an optionholder's stock option agreement, or other written agreement between us and the recipient approved by the plan administrator, provide otherwise, if an optionholder's service relationship with us or any of our affiliates ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws. If an optionholder's service relationship with us or any of our affiliates ceases due to death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 18 months following the date of death. If an optionholder's service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO or (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options or stock appreciation rights generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator or a duly authorized officer, an option may be transferred pursuant to a domestic relations order, official marital settlement agreement or other divorce or separation instrument.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an award holder during any calendar year under all of our stock plans may not exceed $100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, or other written agreement between us and the recipient approved by the plan administrator, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, past or future services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Stock Appreciation Rights. Stock appreciation rights are granted under stock appreciation right agreements adopted by the plan administrator. The plan administrator determines the purchase price or strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2020 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator. Stock appreciation rights may be settled in cash or shares of common stock or in any other form of payment as determined by the Board and specified in the stock appreciation right agreement.

The plan administrator determines the term of stock appreciation rights granted under the 2020 Plan, up to a maximum of ten years. If a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. This period may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2020 Plan permits the grant of performance awards that may be settled in stock, cash or other property. Performance awards may be structured so that the stock or cash will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period. Performance awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the common stock.

The performance goals may be based on any measure of performance selected by the board of directors. The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the board of directors at the time the performance award is granted, the board will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (i) to exclude restructuring or other nonrecurring charges; (ii) to exclude exchange rate effects; (iii) to exclude the effects of changes to generally accepted accounting principles; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude the effects of items that are "unusual" in nature or occur "infrequently" as determined under generally accepted accounting principles; (vi) to exclude the dilutive effects of acquisitions or joint ventures; (vii) to assume that any portion of our business which is divested achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (viii) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (ix) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (xi) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other Equity Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the award (or cash equivalent) and all other terms and conditions of such awards.

Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid to any non-employee director with respect to any calendar year, including awards granted and cash fees paid by us to such non-employee director, will not exceed $ in total value; provided that such amount will increase to for the first year for newly appointed or elected non-employee directors.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2020 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued on the exercise of ISOs, and (4) the class and number of shares and exercise price, strike price or purchase price, if applicable, of all outstanding awards.

Corporate Transactions. The following applies to awards granted under the 2020 Plan in the event of a corporate transaction (as defined in the 2020 Plan), unless otherwise provided in a participant's award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the plan administrator at the time of grant.

In the event of a corporate transaction, any awards outstanding under the 2020 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the award may be assigned to the successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such awards, then (i) with respect to any such awards that are held by participants whose continuous service has not terminated prior to the effective time of the corporate transaction, or current participants, the vesting (and exercisability, if applicable) of such awards will be accelerated in full to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such awards will lapse (contingent upon the effectiveness of the corporate transaction), and (ii) any such awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such awards will not terminate and may continue to be exercised notwithstanding the corporate transaction.

In the event an award will terminate if not exercised prior to the effective time of a corporate transaction, the plan administrator may provide, in its sole discretion, that the holder of such award may not exercise such award but instead will receive a payment equal in value to the excess (if any) of (i) the per share amount payable to holders of common stock in connection with the corporate transaction, over (ii) any per share exercise price payable by such holder, if applicable. In addition, any escrow, holdback, earn out or similar provisions in the definitive agreement for the corporate transaction may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of common stock.

Change in Control. Awards granted under the 2020 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control (as defined in the 2020 Plan) as may be provided in the applicable award agreement or in any other written agreement between us or any affiliate and the participant, but in the absence of such provision, no such acceleration will automatically occur.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend or terminate our 2020 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2020 Plan. No awards may be granted under our 2020 Plan while it is suspended or after it is terminated.

2010 Equity Incentive Plan

Our Amended and Restated 2010 Stock Plan (2010 Plan) was adopted by our board of directors and approved by our stockholders in February 2010, and was most recently amended on October 29, 2019. Our 2010 Plan permits the grant of incentive stock options within the meaning of Code Section 422 to our employees and to any of our parent or subsidiary corporation's employees, and nonstatutory stock options and restricted stock purchase rights to our employees, directors, and consultants and employees and consultants of any parent, subsidiary or affiliate of ours. Options to purchase the Company's common stock may be granted at a price not less than 100% of the fair market

value in the case of ISO or NSO, except for an employee or nonemployee with options who owns more than 10% of the voting power of all classes of stock of the Company in which case the exercise price shall be no less than 110% of the fair market value per share on the grant date. Our 2010 Plan will be terminated prior to the closing of this offering, and thereafter we will not grant any additional awards under our 2010 Plan. However, our 2010 Plan will continue to govern the terms and conditions of the outstanding awards previously granted thereunder.

Share Reserve. As of December 31, 2019, options to purchase 32,793,421 shares of our common stock were outstanding with a weighted-average exercise price of $0.17 per share, and 776,032 shares of our common stock remained available for future awards under our 2010 Plan.

Administration. Our board of directors or a committee delegated by our board of directors administers our 2010 Plan. Subject to the terms of our 2010 Plan, the administrator has the power to, among other things, determine who will be granted awards, to determine the specific terms and conditions of each award (including the number of shares subject to the award and when the award will vest and, as applicable, become exercisable), to accelerate the time(s) at which an award may vest or be exercised, and to construe and interpret the 2010 Plan and awards granted thereunder.

Capital Structure Changes. In the event of certain changes in our capital structure, such as a stock split or recapitalization, appropriate and proportionate adjustments will be made to the number of shares reserved for issuance under our 2010 Plan; and the number of shares and price per share, if applicable, of all outstanding awards under our 2010 Plan.

Corporate Transaction. Our 2010 Plan provides that upon a corporate transaction, awards will be assumed or substituted in the transaction. If the surviving or acquiring corporation does not assume awards, they will terminate prior to the transaction, unless otherwise expressly provided in an individual award agreement or in any other written agreement with a participant. Under the 2010 Plan, a corporate transaction is generally the consummation of (1) a sale of all or substantially all of our assets or (2) our merger, consolidation or capital reorganization with or into another corporation (including a change of control, as described below).

Change of Control. Unless otherwise expressly provided in an individual award agreement or in any other written agreement with a participant, in the event of a change of control, if a participant who holds an outstanding award that is assumed or substituted by a successor corporation in the change of control, or holds restricted stock issued upon exercise of an outstanding option or stock purchase right, is involuntarily terminated (as defined in the 2010 Plan) by the successor corporation at, or within three months following, the closing of such transaction, then any such assumed or substituted awards will accelerate and become exercisable as to the number of shares that would otherwise have vested and been exercisable as of the date 30 days from the date of termination, and any repurchase right applicable to any shares will lapse as to the number of shares as to which the repurchase right would otherwise have lapsed as of the date 30 days from the date of termination. Under the 2010 Plan, a change of control is generally (1) a sale of all or substantially all of our assets or (2) our merger or consolidation with or into another corporation, other than a merger or consolidation in which the stockholders holding more than 50% of our shares immediately before the transaction own more than 50% of the voting power following the merger or consolidation.

Amendment and Termination. Our board of directors may amend, suspend or terminate our 2010 Plan at any time, subject to stockholder approval where such approval is required by applicable law. Our board of directors also may amend any outstanding award. However, no amendment to our 2010 Plan or an award granted thereunder may impair a participant's rights under an award without his or her written consent. As discussed above, we will terminate our 2010 Plan prior to the closing of this offering and no new awards will be granted thereunder following such termination.

2020 Employee Stock Purchase Plan

We expect that our board of directors will adopt, and our stockholders will approve prior to the closing of this offering, our 2020 Employee Stock Purchase Plan (2020 ESPP). The ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of the ESPP is to

secure the services of new employees, to retain the services of existing employees, and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP includes two components. One component is designed to allow eligible U.S. employees to purchase our common stock in a manner that may qualify for favorable tax treatment under Section 423 of the Code. In addition, purchase rights may be granted under a component that does not qualify for such favorable tax treatment because of deviations necessary to permit participation by eligible employees who are foreign nationals or employed outside of the United States while complying with applicable foreign laws.

Share Reserve. Following this offering, the ESPP authorizes the issuance of shares of our common stock under purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2021 through January 1, 2030, by the lesser of (1) % of the total number of shares of our common stock outstanding on the last day of the fiscal year before the date of the automatic increase, and (2) shares; provided that before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (1) and (2). As of the date hereof, no shares of our common stock have been purchased under the ESPP.

Administration. Our board of directors administers the ESPP and may delegate its authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering under the ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share that is at least the lesser of (1) 85% of the fair market value of a share of our common stock on the first date of an offering or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week, (2) being customarily employed for more than five months per calendar year or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of $25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each calendar year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value under Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to: (1) the class(es) and maximum number of shares reserved under the ESPP, (2) the class(es) and maximum number of shares by which the share reserve may increase automatically each year, (3) the class(es) and number of shares subject to and purchase price applicable to outstanding offerings and purchase rights, and (4) the class(es) and number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of certain significant corporate transactions, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring

entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within ten business days before such corporate transaction, and such purchase rights will terminate immediately after such purchase.

Under the ESPP, a corporate transaction is generally the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

ESPP Amendment or Termination. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP as required by applicable law or listing requirements.

Limitations on Liability and Indemnification Matters

Upon the closing of this offering, our certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit. Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our certificate of incorporation will authorize us to indemnify our directors, officers, employees, and other agents to the fullest extent permitted by Delaware law. Our bylaws will provide that we are required to indemnify our directors and executive officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our bylaws will also provide that, upon satisfaction of certain conditions, we will advance expenses incurred by a director or executive officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any executive officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers, and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines, and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these certificate of incorporation and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and executive officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and executive officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and executive officers as required by these indemnification provisions.

At present, there is no pending litigation or proceeding involving any of our directors, executive officers or employees for which indemnification has been sought and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers or persons controlling us, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans that are intended to comply with Rule 10b5-1 under the Exchange Act, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or executive officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to the expiration of the period ending on, and including, the 180th day after the date of this prospectus, the sale of any shares under such plan would be subject to the lock-up agreement that the director or executive officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2016 to which we have been a participant in which the amount involved exceeded or will exceed $120,000, and in which any of our then directors, executive officers or holders of more than 5% of any class of our capital stock at the time of such transaction, or any members of their immediate family, had or will have a direct or indirect material interest, other than compensation arrangements which are described in "Executive Compensation" and "Management—Non-Employee Director Compensation."

Series F-1 Preferred Stock Financing

In May 2016, we issued and sold 15,151,515 shares of our Series F-1 preferred stock to Boston Scientific Corporation at a price of $1.32 per share for aggregate gross proceeds of approximately $20.0 million. In January 2017, we issued and sold 7,575,757 shares of our Series F-1 preferred stock to Boston Scientific Corporation at a price of $1.32 per share for aggregate gross proceeds of approximately $10.0 million. Each share of Series F-1 preferred stock will automatically convert into one share of our common stock upon the closing of this offering.

Series G-1 Preferred Stock Financing

In April 2019, we issued and sold an aggregate of 49,342,376 shares of our Series G-1 preferred stock at a price of $1.32 per share for aggregate gross proceeds of $65.1 million, including the conversion of $25.1 million of outstanding indebtedness under the Second Lien Loan and Security Agreement with BSC (BSC Agreement). Each share of Series G-1 preferred stock will automatically convert into one share of our common stock upon the closing of this offering. The following table summarizes the participation in the foregoing transactions by our directors, executive officers and holders of more than 5% of any class of our capital stock as of the date of such transactions:

Related Party	Shares of Series G-1 Preferred Stock	Aggregate Purchase Price
Entities affiliated with Ally Bridge Group	11,363,636	$ 15,000,000
Entities affiliated with LVP Life Science Ventures III, L.P.	2,289,908	$ 3,022,679
Montreux Growth Partners II, L.P.	2,263,453	$ 2,987,758
Boston Scientific Corporation	20,819,097	$ 27,481,213

Loan and Security Agreement with BSC

In May 2017, we entered into the BSC Agreement. For more information regarding this agreement, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources; Plan of Operation."

Investor Rights, Voting and Co-Sale Agreements

In connection with our preferred stock financings, we entered into investor rights, voting, and right of first refusal and co-sale agreements containing registration rights, information rights, voting rights, and rights of first refusal, among other things, with certain holders of our preferred stock and certain holders of our common stock, including entities affiliated with Montreux Equity Partners, an entity affiliated with Dr. Matly, entities affiliated with De Novo Ventures, an entity affiliated with Mr. Ferrari, entities affiliated with Latterell Venture Partners, an entity affiliated with Mr. Salmon, entities affiliated with HealthCap V L.P., an entity affiliated with Mr. Lindstrand, entities affiliated with KPCB Holdings, Inc., an entity affiliated with Mr. Mead, and entities affiliated with Ally Bridge Group, an entity affiliated with Mr. Chon. These stockholder agreements will terminate upon the closing of this offering, except for the registration rights granted under our investor rights agreement, as more fully described in "Description of Capital Stock—Registration Rights."

Employment Agreements; Offer Letter Agreements

We have entered into offer letter agreements with certain of our executive officers. For more information regarding these agreements with our named executive officers, see “Executive Compensation—Employment, Severance, and Change in Control Agreements.”

Stock Option Grants to Directors and Executive Officers

We have granted stock options to certain of our directors and executive officers. For more information regarding the stock options and stock awards granted to our directors and named executive officers, see “Executive Compensation” and “Management—Non-Employee Director Compensation.”

Indemnification Agreements

Our amended and restated certificate of incorporation will contain provisions limiting the liability of directors, and our amended and restated bylaws will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and bylaws will also provide our board of directors with discretion to indemnify our employees and other agents when determined to be appropriate by the board. In addition, we have entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them to the fullest extent permitted by the Delaware General Corporation Law. For more information regarding these agreements, see the section titled “Executive Compensation—Limitations on Liability and Indemnification Matters.”

Related-Person Transaction Policy

In connection with this offering, we intend to adopt a policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, will not be permitted to enter into a related-party transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder or any of their immediate family members or affiliates, in which the amount involved exceeds $120,000, must first be presented to our audit committee for review, consideration, and approval. In approving or rejecting any such proposal, our audit committee will consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, but not limited to, whether the transaction will be on terms no less favorable than terms generally available to an unaffiliated third-party under the same or similar circumstances and the extent of the related-party’s interest in the transaction.

All of the transactions described in this section were entered into prior to the adoption of this policy. Although we have not had a written policy for the review and approval of transactions with related persons, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to relationship or interest of the relevant director, officer or holder of 5% or more of any class of our voting securities in the agreement or transaction was disclosed to our board of directors. Our board of directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of December 31, 2019, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

The percentage ownership information shown in the table prior to this offering is based upon 198,974,494 shares of common stock outstanding as of December 31, 2019, after giving effect to the conversion of all outstanding shares of preferred stock into 177,971,620 shares of our common stock immediately prior to the closing of this offering, including 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019.

The percentage ownership information shown in the table after this offering is based upon shares outstanding, assuming the sale of shares of our common stock by us in the offering and no exercise of the underwriters' option to purchase additional shares of common stock.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before February 29, 2020 which is 60 days after December 31, 2019. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for persons listed in the table is c/o Pulmonx Corporation, 700 Chesapeake Drive, Redwood City, California, 94063.

Name of Beneficial Owner	Number of Shares Beneficially Owned Before this Offering	Percentage of Shares Beneficially Owned	
		Before this Offering	After this Offering
Principal Stockholders			
Boston Scientific Corporation(1)	59,881,087	30.09%	%
KPCB Holdings, Inc.(2)	15,241,102	7.66	
Entities Affiliated with LVP III Associates, L.P.(3)	14,505,952	7.29	
Entities Affiliated with Montreux Equity Partners(4)	14,299,438	7.19	
De Novo Ventures III Liquidating Trust(5)	12,323,243	6.19	
Entities Affiliated with Ally Bridge Group(6)	11,363,636	5.71	
Entities Affiliated with HealthCap V L.P.(7)	11,337,307	5.70	
Directors and Named Executive Officers			
Glendon E. French(8)	12,784,560	6.05	
Derrick Sung, Ph.D.(9)	2,286,595	1.14	
Geoffrey Beran Rose(10)	2,329,093	1.16	
Charles Chon	—	*	
Richard Ferrari	—	*	
Daniel Florin(11)	60,000	*	
Staffan Lindstrand	—	*	
Dana G. Mead, Jr.(12)	60,000	*	
Michael Matly, M.D.(13)	2,263,453	1.14	
Rodney Perkins, M.D.(14)	3,267,031	1.63	
Steven Salmon	—	*	
Oern Stuge, M.D.(15)	900,035	*	
All directors and executive officers as a group (12 persons)(16)	23,950,767	11.10	

* Represents beneficial ownership of less than 1%

(1) The principal business address for Boston Scientific Corporation is 300 Boston Scientific Way, Marlborough, MA 01752-1234.

(2) Consists of (a) 11,829,207 shares of our Series C-1 Preferred Stock held by Kleiner Perkins Caufield & Byers XIII, LLC ("KPCB XIII") and 854,910 shares held by individuals and entities associated with Kleiner Perkins Caufield & Byers ("KPCB"), (b) 1,568,849 shares of our Series D-1 Preferred Stock held by KPCB XIII and 113,382 shares held by individuals and entities associated with KPCB and (c) 815,796 shares of our Series E-1 Preferred Stock held by KPCB XIII and 58,958 shares held by individuals and entities associated with KPCB. All shares are held for convenience in the name of "KPCB Holdings, Inc., as nominee" for the accounts of such individuals and entities. The managing member of KPCB XIII is KPCB XIII Associates, LLC ("KPCB XIII Associates"). L. John Doerr, Raymond J. Lane, Theodore E. Schlein and Brook H. Byers, the managing members of KPCB XIII Associates, exercise shared voting and dispositive control over the shares held by KPCB XIII. The principal business address for all entities and individuals affiliated with KPCB is c/o Kleiner Perkins Caufield & Byers, LLC, 2750 Sand Hill Road, Menlo Park, CA 94025.

(3) Consists of (a) 674,695 shares held by LVP III Associates, L.P., (b) 337,344 shares held by LVP III Partners, L.P. and (c) 13,493,913 shares held by LVP Life Science Ventures III, L.P. LVP GP III, LLC is the general partner of LVP III Associates, L.P., LVP III Partners, L.P. and LVP Life Science Ventures III, L.P. Patrick Latterell, Stephen Salmon and James Woody, the members of LVP GP III, LLC, share voting and investment power with respect to these shares. The principal business address for all entities and individuals affiliated with Latterell Venture Partners is 2603 Camino Ramon, Suite 200, San Ramon, CA 94583.

(4) Consists of (a) 5,600,103 shares held by Montreux Equity Partners II SBIC, L.P. ("Montreux Equity II"), (b) 6,435,882 shares held by Montreux Equity Partners III SBIC, L.P. ("Montreux Equity III") and (c) 2,263,453 shares held by Montreux Growth Partners II, L.P. ("Montreux Growth"). Montreux Equity Management II SBIC, LLC is the general partner of Montreux Equity II, Montreux Equity Management III SBIC, LLC is the general partner of Montreux Equity III and Montreux Growth Management II, LLC is the general partner

of Montreux Growth. Daniel K. Turner III is the managing member of Montreux Equity Management II SBIC, LLC and Montreux Equity Management III SBIC, LLC. Daniel K. Turner III and Dr. Michael Matly are the managing members of Montreux Growth Management II, LLC. The principal business address for all entities and individuals affiliated with Montreux Equity Partners is Four Embarcadero Center, Suite 3720, San Francisco, CA 94111.

(5) The trustees of the De Novo Ventures III Liquidating Trust (“De Novo”) are Fred Dotzler, Richard Ferrari, Joseph Mandato and Jay Watkins. These trustees exercise shared voting and dispositive control over the shares held by De Novo. The address for De Novo is PO Box 2160, Saratoga, California 95070.

(6) Consists of (a) 3,030,303 shares held by ABG YY Limited (“ABG YY”) and (b) 8,333,333 shares held by ABG-Pulmonx Limited (“ABG Pulmonx”). ABG Fund III exercises voting and dispositive control of all shares held by ABG Pulmonx. ABG Innovation Capital Partners III GP Limited is the general partner of ABG Innovation Capital Partners III GP, L.P., which is the general partner of ABG Fund III. Mr. Fan Yu (Frank) is the sole shareholder and sole director of ABG Innovation Capital Partners III GP Limited. The board of directors of ABG Management Ltd., consisting of Mr. Fan Yu (Frank) and Mr. Chee On Pang (Andrew), exercises voting and dispositive control of all shares held by ABG YY. Mr. Charles Chon is a partner and managing director of Ally Bridge Group. The principal business address for all entities and individuals affiliated with Ally Bridge Group is Unit 3002-3004, 30/F., Gloucester Tower, The Landmark, 15 Queen’s Road Central, Hong Kong; ABG YY Limited: 27/F, No. 238 Des Voeux Road Central, Hong Kong.

(7) Consists of (a) 11,167,249 shares held by HealthCap V, L.P. ("HCLP") and (b) 170,058 shares held by OFCO Club V (“OFCO”). HealthCap V GP SA ("HCSA") is the sole general partner of HCLP. HCSA has voting and dispositive power over the shares held by HCLP. Björn Odlander, Peder Fredrikson, Staffan Lindstrand, Anki Forsberg, Per Samuelsson, Johan Christenson, Jacob Gunterberg, Mårten Steen, Per-Olof Eriksson, Carl-Johan Dalsgaard and Eugen Steiner, the members of HCSA, may be deemed to possess voting and dispositive power over the shares held by HCLP and may be deemed to have indirect beneficial ownership of the shares held by such entities. The principal business address for HCSA is c/o HealthCap V GP SA, 18, Avenue d’Ouchy, 1006 Lausanne, Switzerland. OFP V Advisor AB, (“OFP V AB”) is a member of OFCO and has voting and dispositive control over the shares held by OFCO. Björn Odlander, Per Olof Eriksson, and Ann Christine Forsberg are members of the Board of OFP V AB. Further, Björn Odlander, Peder Fredrikson, Staffan Lindstrand, Ann Christine Forsberg, Per Samuelsson, Johan Christenson, Jacob Gunterberg, Per-Olof Eriksson, Carl-Johan Dalsgaard and Eugen Steiner are directly or indirectly members of OFP V AB and may be deemed to possess voting and dispositive control over the shares held by OFCO and may be deemed to have indirect beneficial ownership of the shares held by OFCO. The principal address for OFP and individuals affiliated with HealthCap is Engelbrektsplan 1, 114 34 Stockholm, Sweden.

(8) Represents (a) 285,714 shares held by Glendon E. French III Children’s Irrevocable Trust dated November 17, 1998, (b) 12,498,846 shares issuable pursuant to immediately exercisable options, including 9,302,450 shares issuable following exercise of such options that are scheduled to vest within 60 days of December 31, 2019.

(9) Represents (a) 1,524,396 shares held by Mr. Sung, all of which are subject to a right of repurchase by us as of February 29, 2020, 60 days after December 31, 2019 and (b) 762,199 shares issuable pursuant to immediately exercisable options, all of which are currently unvested and exercisable and will begin vesting monthly upon the closing of this offering.

(10) Represents (a) 575,634 shares held by Mr. Rose and (b) 1,753,459 shares issuable pursuant to immediately exercisable options, including 1,212,625 shares issuable following exercise of such options that are scheduled to vest within 60 days of December 31, 2019.

(11) Represents 60,000 shares issuable pursuant to an immediately exercisable option, including 20,000 shares issuable following exercise of such option that are scheduled to vest within 60 days of December 31, 2019.

(12) Represents 60,000 shares issuable pursuant to an immediately exercisable option, including 20,000 shares issuable following exercise of such option that are scheduled to vest within 60 days of December 31, 2019.

(13) Consists of 2,263,453 shares held by Montreux Growth Partners II, L.P. (“Montreux Growth”). Montreux Growth Management II, LLC is the general partner of Montreux Growth. Daniel K. Turner III and Dr. Michael Matly are the managing members of Montreux Growth Management II, LLC. The principal business address for all entities and individuals affiliated with Montreux Equity Partners is Four Embarcadero Center, Suite 3720, San Francisco, CA 94111.

(14) Represents (a) 100,000 shares held by Rodney C. Perkins, as Trustee of the Perkins Family Revocable Trust dated February 28, 1986, (b) 2,202,031 shares held by Mr. Perkins and (c) 965,000 shares issuable pursuant to immediately exercisable options, all of which are scheduled to vest within 60 days of December 31, 2019.

(15) Represents (a) 262,541 shares held by Mr. Stuge and (b) 637,494 shares issuable pursuant to immediately exercisable options, all of which are scheduled to vest within 60 days of December 31, 2019.

(16) Includes (a) 7,213,769 shares and (b) 16,736,998 shares issuable pursuant to immediately exercisable options, including 12,157,569 shares issuable following exercise of such options that are scheduled to vest within 60 days of December 31, 2019.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock, certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, as each will be in effect upon the closing of this offering, and certain provisions of Delaware law are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is part. We refer in this section to our amended and restated certificate of incorporation and amended and restated bylaws that we intend to adopt in connection with this offering as our certificate of incorporation and bylaws, respectively.

General

Upon the closing of this offering, our amended and restated certificate of incorporation will authorize us to issue up to shares of our common stock, $0.001 per value per share. In addition, our amended and restated certificate of incorporation will authorize shares of undesignated preferred stock, $0.001 par value per share, the rights, preferences, and privileges of which may be designated from time to time by our board of directors.

As of December 31, 2019, we had 21,002,874 shares of common stock held by 270 stockholders of record and 177,971,620 shares of preferred stock outstanding, which includes (i) 175,832,872 shares of convertible preferred stock outstanding as of December 31, 2019 and (ii) 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019. After giving effect to the conversion of all outstanding shares of preferred stock into shares of common stock immediately upon the closing of this offering there would have been 198,974,494 shares of common stock outstanding on December 31, 2019, held by 328 stockholders of record. As of December 31, 2019, we had additional outstanding warrants to purchase 14,191 shares of Series C-1 convertible preferred stock with an exercise price of $1.057 per share, which warrants expired on February 9, 2020. As of December 31, 2019, we also had outstanding options to acquire 32,793,421 shares of common stock.

Common Stock

Dividend and Distribution Rights

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of legally available funds.

Voting Rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions. The rights, preferences, and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of our preferred stock that we may designate and issue in the future.

Liquidation Rights

In the event of our liquidation, dissolution or winding-up, upon the completion of the distributions required with respect to any series of preferred stock that may then be outstanding, or remaining assets legally available for distribution to stockholders shall be distributed on an equal priority, pro rata basis to the holders of common stock.

Preferred Stock

All currently outstanding shares of our preferred stock will be converted to common stock immediately upon the closing of this offering.

Following the closing of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences, and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of our common stock until our board of directors determines the specific rights attached to that preferred stock.

We have no present plans to issue any shares of preferred stock.

Options

As of December 31, 2019, options to purchase an aggregate of 32,793,421 shares of our common stock were outstanding under our 2010 Plan at a weighted-average exercise price of $0.17 per share. For additional information regarding the terms of our 2010 Plan, see “Executive Compensation—Employee Benefit Plans—2010 Equity Incentive Plan.”

Warrants

As of December 31, 2019, we had warrants to purchase an aggregate of 2,152,939 shares of our Series C-1 convertible preferred stock outstanding with an exercise price of $1.057 per share. Of these, warrants to purchase 2,138,748 shares of Series C-1 convertible preferred stock were cash exercised in January and February 2020 and warrants to purchase 14,191 shares of our Series C-1 convertible preferred stock expired on February 9, 2020.

Registration Rights

After the closing of this offering, certain holders of shares of our common stock, including those shares of our common stock that will be issued upon conversion of our preferred stock in connection with this offering, will be entitled to certain rights with respect to registration of such shares under the Securities Act pursuant to the terms of an investor rights agreement. These shares are collectively referred to herein as registrable securities.

The investor rights agreement provides the holders of registrable securities with demand, piggyback and S-3 registration rights as described more fully below. As of December 31, 2019, after giving effect to the conversion of all outstanding shares of preferred stock into shares of our common stock in connection with the closing of this offering, there would have been an aggregate of 177,971,620 registrable securities that were entitled to these

demand registration rights, an aggregate of 186,586,148 registrable securities that were entitled to these piggyback registration rights, and an aggregate of 177,971,620 registrable securities that were entitled to these S-3 registration rights. The number of registrable securities that were entitled to the piggyback registration rights and the S-3 registration rights as of December 31, 2019 includes 2,138,748 shares of Series C-1 convertible preferred stock issued in January and February 2020 upon the cash exercise of warrants that were outstanding as of December 31, 2019.

Demand Registration Rights

At any time beginning six months after the effective date of the registration statement of which this prospectus forms a part, the holders of at least a majority of the registrable securities then outstanding have the right to make up to two demands that we file a registration statement under the Securities Act covering at least 25% of the registrable securities then outstanding, subject to specified exceptions.

Piggyback Registration Rights

If we register any securities for public sale, the holders of our registrable securities then outstanding will each be entitled to notice of the registration and will have the right to include their shares in the registration statement.

The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, but not below 20% of the total number of securities included in such registration.

Registration on Form S-3

If we are eligible to file a registration statement on Form S-3, the holders of at least 25% our registrable securities have the right to demand that we file registration statements on Form S-3; provided, that the aggregate amount of securities to be sold under the registration statement is at least $1.0 million. We are not obligated to effect a demand for registration on Form S-3 by holders of our registrable securities more than once during any 12-month period. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Expenses of Registration

We will pay all expenses relating to any demand, piggyback, or Form S-3 registration, other than underwriting discounts and commissions, subject to specified conditions and limitations.

Termination of Registration Rights

The registration rights will terminate three years following the closing of this offering and, with respect to any particular stockholder, when such stockholder is able to sell all of its shares during a 90-day period pursuant to Rule 144 under the Securities Act or another similar exemption.

Anti-Takeover Provisions

Anti-Takeover Statute

We are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66⅔% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge, or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- subject to certain exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges, or other financial benefits by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an entity (other than the corporation and any direct or indirect majority-owned subsidiary of the corporation) or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation and Bylaws to be in Effect Upon the Closing of this Offering

Our certificate of incorporation will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the shares of our common stock outstanding will be able to elect all of our directors. Our certificate of incorporation and bylaws will also provide that directors may be removed by the stockholders only for cause upon the vote of 66⅔% or more of our outstanding common stock. Furthermore, the authorized number of directors may be changed only by resolution of our board of directors, and vacancies and newly created directorships on our board of directors may, except as otherwise required by law or determined by our board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our certificate of incorporation and bylaws will also provide that all stockholder actions must be effected at a duly called meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. Our bylaws will also provide that only our chairman of the board, chief executive officer or our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors may call a special meeting of stockholders.

Our bylaws will also provide that stockholders seeking to present proposals before our annual meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and, subject to applicable law, will specify requirements as to the form and content of a stockholder's notice.

Our certificate of incorporation and bylaws will provide that the stockholders cannot amend many of the provisions described above except by a vote of 66⅔% or more of our outstanding common stock.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Choice of Forum

Our amended and restated certificate of incorporation to be in effect upon the closing of this offering will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty owed by any of our directors, officers, employees, or stockholders to us or our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any claim for which the federal district courts of the United States have exclusive jurisdiction. In addition, our amended and restated certificate of incorporation to be in effect upon the closing of this offering will further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. See "Risk Factors—Risks Related to This Offering and Ownership of Our Common Stock—Our amended and restated certificate of incorporation that will be in effect at the closing of this offering will provide that the Court of Chancery of the State of Delaware and, to the extent enforceable, the federal district courts of the United States will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees"

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219 and the telephone number is (800) 937-5449.

Listing

We have applied to list our common stock on the Nasdaq Global Market under the trading symbol “LUNG.”

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, no public market for our common stock existed, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market could adversely affect prevailing market prices of our common stock from time to time and could impair our ability to raise equity capital in the future. Furthermore, because only a limited number of shares of our common stock will be available for sale shortly after this offering due to certain contractual and legal restrictions on resale described below, sales of substantial amounts of our common stock in the public market after such restrictions lapse, or the anticipation of such sales, could adversely affect the prevailing market price of our common stock and our ability to raise equity capital in the future.

Based upon the number of shares outstanding as of December 31, 2019, upon the closing of this offering, we will have outstanding an aggregate of shares of common stock (or shares if the underwriters exercise in full their option to purchase additional shares of our common stock). This includes shares of common stock that we are selling in this offering, which shares may be resold in the public market immediately following this offering, and assumes no exercise of outstanding options or warrants, after giving effect to the conversion of all outstanding shares of our preferred stock into 175,832,872 shares of common stock immediately upon the closing of this offering. All of the shares sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, unless held by our affiliates, as that term is defined under Rule 144 under the Securities Act, whose sales would be subject to the Rule 144 resale restrictions described below, or subject to lock-up agreements. The remaining shares of common stock outstanding upon the closing of this offering are restricted securities as defined in Rule 144. Restricted securities may be sold in the U.S. public market only if registered under the Securities Act or if they qualify for an exemption from registration, including by reason of Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. Subject to the lock-up arrangements described below and the provisions of Rule 144, these restricted securities will be available for sale in the public market after the date of this prospectus.

As of December 31, 2019, of the 32,793,421 shares of common stock issuable upon exercise of options outstanding, approximately 32,793,421 shares will be “restricted securities,” as that term is defined in Rule 144 under the Securities Act. All of these restricted securities will be subject to the 180-day lock-up period described below. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below, or any other exemption and, if subject to lock-up agreements, may only be sold after the expiration of the 180-day lock-up period.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event that any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition and investment.

In addition, the shares of common stock reserved for future issuance under our 2020 Plan will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, a registration statement under the Securities Act, or an exemption from registration, including Rule 144 and Rule 701.

Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of us who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.

Non-Affiliates

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates;
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to resell an unlimited number of restricted securities effective immediately upon the closing of this offering without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting. Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Affiliates

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale, would be subject to the restrictions described above. Sales of restricted or unrestricted shares of our common stock by affiliates are also subject to additional restrictions, by which such person would be required to comply with the manner of sale and notice provisions of Rule 144 and would be entitled to sell in "broker's transactions" or certain "riskless principal transactions" or to market makers, within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after the closing of this offering based on the number of shares outstanding as of December 31, 2019; or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Affiliate resales under Rule 144 are also subject to the availability of current public information about us. In addition, if the number of shares being sold under Rule 144 by an affiliate during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of $50,000, the seller must file a notice on Form 144 with the Securities and Exchange Commission (SEC) and Nasdaq Global Market concurrently with either the placing of a sale order with the broker or the execution directly with a market maker.

Rule 701

In general, under Rule 701 a person who purchased shares of our common stock pursuant to a written compensatory stock or option plan or contract before the effective date of a registration statement under the Securities Act and who is not deemed to have been one of our affiliates during the immediately preceding 90 days may sell these shares in reliance upon Rule 144, but without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Rule 701 also permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the date of this prospectus before selling such shares pursuant to Rule 701. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Exchange Act.

Form S-8 Registration Statements

As soon as practicable after the closing of this offering, we intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our equity incentive plans, including pursuant to outstanding options. See "Executive Compensation—Employee Benefit Plans" for a description of our equity incentive plans. These registration statements will become effective immediately upon filing. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

Lock-Up Agreements

In connection with this offering, we, our directors and officers, and substantially all of our other existing security holders have agreed, subject to certain limited exceptions, not to offer, sell or transfer any of our common stock, stock options or other securities convertible into, exchangeable for, or exercisable for, our common stock for 180 days after the date of this prospectus without the prior written consent of BofA Securities, Inc. and Morgan Stanley & Co. LLC on behalf of the underwriters. See "Underwriting" for a more complete description of the lock-up agreements that we, our directors, executive officers, and substantially all of our other existing security holders will enter into in connection with this offering.

Any determination to release shares subject to the lock-up agreements would be based on a number of factors at the time of determination, including but not necessarily limited to the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold, contractual obligations to release certain shares subject to the lock-up agreements in the event any such shares are released, subject to certain specific limitations and thresholds, and the timing, purpose, and terms of the proposed sale.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain of our security holders, including our investor rights agreement and agreements governing our equity awards, that contain market stand-off provisions imposing restrictions on the ability of such security holders to offer, sell or transfer our equity securities for a period of 180 days following the date of this prospectus.

Registration Rights

Upon the closing of this offering, the holders of 186,586,148 shares of our common stock, including shares issuable upon the conversion of outstanding shares of preferred stock and shares of preferred stock issued upon the exercise in January and February 2020 of outstanding warrants, or their transferees, subject to any lock-up agreements they have entered into, will be entitled to specified rights with respect to the registration of the offer and sale of common stock issuable upon conversion of such shares of common stock under the Securities Act. Registration of the offer and sale of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See "Description of Capital Stock—Registration Rights" for additional information.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common stock by "Non-U.S. Holders" (as defined below). This discussion is for general information purposes only and does not consider all aspects of U.S. federal income taxation that may be relevant to particular Non-U.S. Holders in light of their individual circumstances or to certain types of Non-U.S. Holders subject to special tax rules, including partnerships or other entities or arrangements treated as pass-through or disregarded entities for U.S. federal income tax purposes, banks, financial institutions or other financial services entities, broker-dealers, insurance companies, tax-exempt organizations, governmental organizations, pension plans, real estate investment trusts, controlled foreign corporations, passive foreign investment companies, regulated investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, persons who use or are required to use mark-to-market accounting, persons that hold more than 5% of our outstanding common stock, directly or indirectly, during the applicable testing period, persons that are "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds, persons that hold our shares as part of a "straddle," a "hedge," a "conversion transaction," "synthetic security," integrated investment, or other risk reduction strategy, certain U.S. expatriates and former citizens or permanent residents of the United States, persons deemed to sell our common stock under the constructive sale provisions of the Code, persons who hold or receive shares of our common stock pursuant to the exercise of an employee stock option or otherwise as compensation, or investors in pass-through entities (or entities that are treated as disregarded entities for U.S. federal income tax purposes). In addition, this discussion does not address the potential application of the gift or estate tax, alternative minimum tax, Medicare contribution tax on net investment income, or any tax considerations that may apply to Non-U.S. Holders under state, local or non-U.S. tax laws, and any other U.S. federal tax laws. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax considerations that may be relevant to them.

This discussion is based on the Code and applicable Treasury regulations promulgated thereunder (Treasury Regulations) rulings, administrative pronouncements, and judicial decisions that are issued and available as of the date of this registration statement, all of which are subject to change or differing interpretations at any time with possible retroactive effect. We have not sought, and will not seek, any ruling from the Internal Revenue Service (IRS) with respect to the tax consequences discussed herein, and there can be no assurance that the IRS will not take a position contrary to the tax consequences discussed below or that any position taken by the IRS would not be sustained. This discussion is limited to a Non-U.S. Holder who will hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment). For purposes of this discussion, the term "Non-U.S. Holder" means a beneficial owner of our common stock that is not a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) and is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation) created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a court within the United States can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of our common stock, the tax treatment of such partnership and a partner in such partnership generally will depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our shares, you should consult your tax advisor regarding the tax consequences of the purchase, ownership, and disposition of our common stock.

THIS SUMMARY IS NOT INTENDED TO BE TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING, AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Distributions on Our Common Stock

In general, subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "Foreign Accounts," distributions, if any, paid on our common stock to a Non-U.S. Holder (to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles) will constitute dividends and be subject to U.S. withholding tax at a rate equal to 30% of the gross amount of the dividend, or a lower rate prescribed by an applicable income tax treaty, unless the dividends are effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States. Any distribution not constituting a dividend (because such distribution exceeds our current and accumulated earnings and profits) will be treated first as reducing the Non-U.S. Holder's basis in its shares of common stock, but not below zero, and to the extent it exceeds the Non-U.S. Holder's basis, as capital gain from the sale or exchange of such stock (see "Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock" below).

A Non-U.S. Holder who claims the benefit of an applicable income tax treaty generally will be required to satisfy certain certification and other requirements prior to the distribution date. Such Non-U.S. Holders must generally provide us or our paying agent, as applicable, with a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E (or other appropriate form) claiming an exemption from or reduction in withholding under an applicable income tax treaty. Such certificate must be provided before the payment of dividends and must be updated periodically. If tax is withheld in an amount in excess of the amount applicable under an income tax treaty, a refund of the excess amount may generally be obtained by a Non-U.S. Holder by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

Dividends that are effectively connected with a Non-U.S. Holder's conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder) generally will not be subject to U.S. federal withholding tax if the Non-U.S. Holder files the required forms, including IRS Form W-8ECI with us or our paying agent, as applicable, but instead generally will be subject to U.S. federal income tax on a net income basis at regular rates in the same manner as if the Non-U.S. Holder were a resident of the United States. A corporate Non-U.S. Holder that receives effectively connected dividends may be subject to an additional branch profits tax at a rate of 30%, or a lower rate prescribed by an applicable income tax treaty.

Gain on Sale, Exchange or Other Disposition of Our Common Stock

In general, subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "Foreign Accounts," a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless: (1) the gain is effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder); (2) the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are met; or (3) we are or have been a "United States real property holding corporation" for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of disposition or the period that the Non-U.S. Holder held our common stock, and, in the case where shares of our common stock are regularly traded on an established securities market, the Non-U.S. Holder owns, or is treated as owning, more than 5% of our common stock at any time during the foregoing period.

Net gain realized by a Non-U.S. Holder described in clause (1) above generally will be subject to U.S. federal income tax in the same manner as if the Non-U.S. Holder were a resident of the United States. Any gains of a corporate Non-U.S. Holder described in clause (1) above may also be subject to an additional "branch profits tax" at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty.

Gain realized by an individual Non-U.S. Holder described in clause (2) above will be subject to a flat 30% tax (or such lower rate as may be specified by an applicable income tax treaty), which gain may be offset by U.S. source capital losses, even though the individual is not considered a resident of the United States, provided that the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

For purposes of clause (3) above, a corporation is a United States real property holding corporation (USRPHC) if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus any assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not, and we do not anticipate that we will become, a USRPHC. Even if we became a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange, or other taxable disposition of our common stock by reason of our status as an USRPHC so long as our common stock is regularly traded on an established securities market (within the meaning of the applicable Treasury Regulations) and such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our outstanding common stock at any time during the shorter of the five year period ending on the date of disposition and such holder's holding period. However, no assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above. If we are a USRPHC and our common stock is not regularly traded on an established securities market, such Non-U.S. Holder's proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Information Reporting and Backup Withholding

Generally, we must report annually to the IRS and to each Non-U.S. Holder the amount of dividends paid, the name and address of the recipient, and the amount, if any, of tax withheld. These information reporting requirements apply even if withholding was not required because the dividends were effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States or withholding was reduced by an applicable income tax treaty. Under applicable income tax treaties or other agreements, the IRS may make its reports available to the tax authorities in the country in which a Non-U.S. Holder is resident or organized.

Dividends paid to a Non-U.S. Holder that is not an exempt recipient generally will be subject to backup withholding, currently at a rate of 24%, unless the Non-U.S. Holder certifies to the payor as to its foreign status, which certification may generally be made on an applicable IRS Form W-8. Notwithstanding the foregoing, backup withholding may apply if we have actual knowledge, or reason to know, that the Non-U.S. Holder is a U.S. person (as defined in the Code) that is not an exempt recipient.

Proceeds from the sale or other disposition of common stock by a Non-U.S. Holder effected by or through a U.S. office of a broker will generally be subject to information reporting and backup withholding, currently at a rate of 24%, unless the Non-U.S. Holder certifies to the withholding agent under penalties of perjury as to, among other things, its name, address, and status as a Non-U.S. Holder (which certification may generally be made on an applicable IRS Form W-8) or otherwise establishes an exemption. Payment of disposition proceeds effected outside the United States by or through a non-U.S. office of a non-U.S. broker generally will not be subject to information reporting or backup withholding if the payment is not received in the United States. Information reporting, but generally not backup withholding, will apply to such a payment if the broker has certain connections with the United States unless the broker has documentary evidence in its records that the beneficial owner thereof is a Non-U.S. Holder and specified conditions are met or an exemption is otherwise established.

Backup withholding is not an additional tax. Any amount withheld under the backup withholding rules from a payment to a Non-U.S. Holder that results in an overpayment of taxes generally will be refunded, or credited against the holder's U.S. federal income tax liability, if any, provided that the required information is timely furnished to the IRS.

Foreign Accounts

Sections 1471 through 1474 of the Code regarding the Foreign Account Tax Compliance Act (commonly referred to as FATCA) generally impose a 30% withholding tax on dividends on, and, subject to the discussion of certain proposed Treasury Regulations below, gross proceeds from the sale or disposition of, our common stock if paid to a foreign entity unless (1) if the foreign entity is a "foreign financial institution," (as specifically defined by applicable rules) the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (2) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain U.S. holders of debt or equity interests in such foreign entity, or (3) the foreign entity is otherwise exempt from FATCA. The U.S. Treasury recently released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a Non-U.S. Holder may be eligible for refunds or credits of the tax. Non-U.S. Holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT OR PROPOSED CHANGE IN APPLICABLE LAW.

UNDERWRITING

BofA Securities, Inc. and Morgan Stanley & Co. LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
BofA Securities, Inc.	
Morgan Stanley & Co. LLC	
Stifel, Nicolaus & Company, Incorporated	
Wells Fargo Securities, LLC	
Canaccord Genuity LLC	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses relating to clearance of this offering with the Financial Industry Regulatory Authority in an amount up to $40,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We, our executive officers and directors and substantially all of our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for or repayable with common stock, for 180 days after the date of this prospectus without first obtaining the written consent of BofA Securities, Inc. and Morgan Stanley & Co. LLC. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- purchase any option or contract to sell any common stock,
- grant any option, right or warrant for the sale of any common stock,
- lend or otherwise dispose of or transfer any common stock,
- request or demand that we file a registration statement or make a confidential submission related to the common stock,
- enter into any swap or other agreement or transaction that transfers, in whole or in part, the economic consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise, or
- publicly disclose the intention to do any of the foregoing.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. BofA Securities, Inc. and Morgan Stanley & Co. LLC in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice.

Nasdaq Listing

We expect the shares to be approved for listing on the Nasdaq Global Market, subject to notice of issuance, under the symbol "LUNG."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,

- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. “Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. “Naked” short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Notice to Prospective Investors in the European Economic Area and the United Kingdom

In relation to each member state of the European Economic Area and the United Kingdom (each, a "Relevant State"), no shares have been offered or will be offered pursuant to the initial offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation), except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

a. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;

b. to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

c. in any other circumstances falling within Article 1(4) of the Prospectus Regulation, provided that no such offer of shares shall require the company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

Each person in a Relevant State who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with the company and the underwriters that it is a qualified investor within the meaning of the Prospectus Regulation.

In the case of any shares being offered to a financial intermediary as that term is used in Article 5(1) of the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer to the public other than their offer or resale in a Relevant State to qualified investors, in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

The company, the underwriters and their affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgements and agreements.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

References to the Prospectus Regulation includes, in relation to the United Kingdom, the Prospectus Regulation as it forms part of the United Kingdom's domestic law by virtue of the European Union (Withdrawal) Act 2018.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

This document is for distribution only to persons who (i) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Financial Promotion Order"), (ii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, (iii) are outside the United Kingdom, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, as amended ("FSMA")) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This document is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission, in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (Exempt Investors) who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, the shares were not offered or sold or caused to be made the subject of an invitation for subscription or purchase and

will not be offered or sold or caused to be made the subject of an invitation for subscription or purchase, and this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, has not been circulated or distributed, nor will it be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (SFA)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law; or

(d) as specified in Section 276(7) of the SFA.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. Certain legal matters will be passed upon for the underwriters by Shearman & Sterling LLP, New York, New York. VLG Investments 1993 and VLG Investments 1994, each of which are entities in which certain partners of Cooley LLP are investors, beneficially own an aggregate 3,341 shares of our common stock.

EXPERTS

The consolidated financial statements as of December 31, 2018 and 2019 and for the years then ended included in this prospectus and in the registration statement, have been so included in reliance on the report of BDO USA, LLP, an independent registered public accounting firm (the report on the consolidated financial statements contains an explanatory paragraph regarding the company's ability to continue as a going concern), appearing elsewhere herein and in the registration statement, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of common stock being offered by this prospectus, which constitutes a part of the registration statement. This prospectus, which constitutes a part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at *www.sec.gov*.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements, and other information with the SEC. These reports, proxy statements, and other information will be available for inspection and copying at the website of the SEC referred to above. We also maintain a website at *www.pulmonx.com*, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. **However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our common stock in this offering.**

Pulmonx Corporation

INDEX TO THE FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Pulmonx Corporation
Redwood City, California

Opinion on the Consolidated Financial Statements
We have audited the accompanying consolidated balance sheets of Pulmonx Corporation (the "Company") as of December 31, 2018 and 2019, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2019, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty
The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations, has negative cash flows from operating activities, and significant accumulated deficit, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Change in Accounting Principle
As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases during the year ended December 31, 2019, due to the adoption of the Accounting Standards Codification Topic 842, "Leases."

Basis for Opinion
These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, LLP

We have served as the Company's auditor since 2011.

San Jose, California

February 21, 2020

Pulmonx Corporation

Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	December 31, 2018	December 31, 2019	Pro forma December 31, 2019 (unaudited)
Assets			
Current assets			
Cash and cash equivalents	$ 4,124	$ 14,767	$ 17,028
Short-term marketable securities	—	13,580	13,580
Accounts receivable, net	2,950	5,511	5,511
Inventory	3,320	5,612	5,612
Prepaid expenses and other current assets	914	1,601	1,601
Total current assets	11,308	41,071	43,332
Property and equipment, net	375	902	902
Goodwill	2,333	2,333	2,333
Intangible assets, net	647	524	524
Deferred offering costs	—	1,563	1,563
Right of use assets	—	6,561	6,561
Other long-term assets	350	579	579
Total assets	$ 15,013	$ 53,533	$ 55,794
Liabilities, Convertible Preferred Stock and Stockholders' Deficit			
Current liabilities			
Accounts payable	$ 1,289	$ 2,681	$ 2,681
Accrued liabilities	5,876	9,463	9,463
Income taxes payable	48	233	233
Deferred revenue	139	173	173
Deferred rent	78	—	—
Current lease liabilities	—	446	446
Derivative liability	642	1,165	1,165
Total current liabilities	8,072	14,161	14,161
Deferred tax liability	48	43	43
Deferred rent, net of current portion	67	—	—
Long-term lease liabilities	—	6,403	6,403
Term loan	14,937	14,965	14,965
Convertible note payable to related party	18,668	—	—
Convertible preferred stock warrant liability	12	—	—
Total liabilities	41,804	35,572	35,572
Commitments and contingencies (Note 7)			

Convertible preferred stock, $0.001 par value, 130,909,906 and 177,985,811 shares authorized as of December 31, 2018 and December 31, 2019; 126,490,496 and 175,832,872 shares issued and outstanding as of December 31, 2018 and December 31, 2019; liquidation value of $145,478 and $210,610 as of December 31, 2018 and December 31, 2019 (Note 10); no shares issued and outstanding, pro forma	140,535	205,339	—
Stockholders' (deficit) equity			
Common stock, $0.001 par value, 180,000,000 shares and 240,000,000 shares authorized as of December 31, 2018 and December 31, 2019; 17,195,258 and 21,002,874 shares issued and outstanding as of December 31, 2018 and December 31, 2019; 198,974,494 shares issued and outstanding, pro forma (unaudited);	17	19	197
Additional paid-in capital	21,124	21,733	229,155
Accumulated other comprehensive income	1,333	1,373	1,373
Accumulated deficit	(189,800)	(210,503)	(210,503)
Total stockholders' (deficit) equity	(167,326)	(187,378)	20,222
Total liabilities, convertible preferred stock and stockholders' (deficit) equity	$ 15,013	$ 53,533	$ 55,794

The accompanying notes are an integral part of these consolidated financial statements.

Pulmonx Corporation

Consolidated Statements of Operations and Comprehensive Loss

(in thousands, except share and per share amounts)

	Years Ended December 31,	
	2018	2019
Revenue	$ 20,004	$ 32,595
Cost of goods sold	7,718	10,181
Gross profit	12,286	22,414
Operating expenses		
Research and development	6,991	6,049
Selling, general and administrative	20,347	34,203
Total operating expenses	27,338	40,252
Loss from operations	(15,052)	(17,838)
Interest income	21	432
Interest expense	(2,520)	(2,317)
Other income (expense), net	(916)	(617)
Net loss before tax	(18,467)	(20,340)
Income tax expense	12	363
Net loss	(18,479)	(20,703)
Other comprehensive income (loss)		
Currency translation adjustment	126	34
Change in unrealized (losses) gains on marketable securities	—	6
Total other comprehensive income (loss)	126	40
Comprehensive loss	$ (18,353)	$ (20,663)
Net loss per share attributable to common stockholders, basic and diluted	$ (1.10)	$ (1.17)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	16,748,545	17,761,858
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)		$ (0.11)
Weighted-average shares used in computing pro forma net loss per share, basic and diluted (unaudited)		180,925,287

The accompanying notes are an integral part of these consolidated financial statements.

Pulmonx Corporation

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit

(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balances at January 1, 2018	126,411,651	$ 140,452	17,013,718	$ 16	$ 20,704	$ 1,207	$ (171,321)	$ (149,394)
Issuance of Series C-1 convertible preferred stock upon exercise of warrants	78,845	83	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	181,540	1	30	—	—	31
Change in shares subject to repurchase	—	—	—	—	24	—	—	24
Stock-based compensation expense	—	—	—	—	366	—	—	366
Currency translation adjustment	—	—	—	—	—	126	—	126
Net loss	—	—	—	—	—	—	(18,479)	(18,479)
Balances at December 31, 2018	126,490,496	$ 140,535	17,195,258	$ 17	$ 21,124	$ 1,333	$ (189,800)	$ (167,326)
Issuance of Series G-1 convertible preferred stock, net of issuance costs of $329	49,342,376	64,804	—	—	—	—	—	—
Issuance of common stock upon exercise of stock options	—	—	3,903,230	4	524	—	—	528
Change in shares subject to repurchase	—	—	—	(2)	(279)	—	—	(281)
Repurchase of early exercised common stock options	—	—	(91,459)	—	—	—	—	—
Common stock retired during the year for no consideration	—	—	(4,155)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	364	—	—	364
Currency translation adjustment	—	—	—	—	—	34	—	34
Change in unrealized (losses) gains on marketable securities	—	—	—	—	—	6	—	6
Net loss	—	—	—	—	—	—	(20,703)	(20,703)
Balances at December 31, 2019	175,832,872	$ 205,339	21,002,874	$ 19	$ 21,733	$ 1,373	$ (210,503)	$ (187,378)

The accompanying notes are an integral part of these consolidated financial statements.

Pulmonx Corporation

Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,	
	2018	**2019**
Cash flows from operating activities		
Net loss	$ (18,479)	$ (20,703)
Adjustments to reconcile net loss to net cash used in operating activities		
Stock-based compensation expense	366	364
Change in fair value of convertible preferred stock warrant liability	12	(12)
Change in fair value of derivative liability	642	523
Allowance for doubtful accounts	(15)	(4)
Inventory write-downs	297	332
Depreciation and amortization expense	270	365
Amortization of debt discount and debt issuance costs	36	28
Amortization of premiums and discounts on short-term marketable securities	—	(61)
Gain on extinguishment of convertible note	—	(32)
Non-cash lease expense	—	836
Net changes in operating assets and liabilities:		
Accounts receivable	(262)	(2,524)
Inventory	(1,245)	(2,613)
Prepaid expenses and other current assets	21	(684)
Other assets	18	3
Accounts payable	(648)	524
Accrued liabilities	928	3,375
Income taxes payable	(34)	182
Deferred rent	(62)	—
Lease liabilities	—	(692)
Deferred tax liability	(200)	(5)
Deferred revenue	(39)	33
Net cash used in operating activities	(18,394)	(20,765)
Cash flows from investing activities		
Purchases of investments	—	(21,450)
Maturities of investments	500	7,937
Purchases of property and equipment	(316)	(720)
Proceeds from sale of property and equipment	16	—
Net cash provided by (used in) investing activities	200	(14,233)
Cash flows from financing activities		
Proceeds from the issuance of convertible note, related party	12,000	6,000
Payments of deferred offering costs	—	(568)
Proceeds from issuance of Series G-1 convertible preferred stock, net of issuance costs of $329	—	39,671
Proceeds from exercise of warrants for Series C-1 convertible preferred stock	83	—
Proceeds from exercise of common stock options	31	528
Payments for the repurchase of early exercised common stock options	—	(12)
Net cash provided by financing activities	12,114	45,619
Effect of exchange rate changes on cash and cash equivalents	154	22
Net (decrease) increase in cash and cash equivalents	(5,926)	10,643
Cash and cash equivalents at beginning of year	10,050	4,124
Cash and cash equivalents at end of year	$ 4,124	$ 14,767

Supplemental non-cash items:				
Increase (lapse) in repurchase rights of common stock	$	24	$	(281)
Purchases of property and equipment in accounts payable	$	—	$	47
Accrued interest for convertible note	$	738	$	496
Conversion of convertible note into Series G-1 convertible preferred stock	$	—	$	25,133
Deferred offering costs in accrued liabilities and accounts payable	$	—	$	995
Deposit for operating lease in accounts payable	$	—	$	231
Operating lease right of use asset recorded on the adoption of ASC 842	$	—	$	1,181
Operating lease right of use assets obtained in exchange for new lease liabilities	$	—	$	6,216
Supplemental disclosure of cash flow information:				
Cash paid for income taxes	$	226	$	196
Cash paid for interest	$	1,361	$	1,396

The accompanying notes are an integral part of these consolidated financial statements.

1. Formation and Business of the Company

The Company

Pulmonx Corporation (the "Company") was incorporated in the state of California in December 1995 as Pulmonx and reincorporated in the state of Delaware in December 2013. The Company is a commercial-stage medical technology company that provides a minimally invasive treatment for patients with severe emphysema, a form of chronic obstructive pulmonary disease (COPD). The Company's solution, which is comprised of the Zephyr Endobronchial Valve (Zephyr Valve), the Chartis Pulmonary Assessment System (Chartis System) and the StratX Lung Analysis Platform (StratX Platform), is designed to treat a broad pool of patients for whom medical management has reached its limits and either do not want or are ineligible for surgical approaches. The Company has subsidiaries in the Cayman Islands, Germany, Switzerland, Australia, the United Kingdom, the Netherlands, Italy, France and Hong Kong.

Liquidity and Going Concern

The Company has incurred operating losses and negative cash flows from operations to date and has an accumulated deficit of $210.5 million as of December 31, 2019. During the years ended December 31, 2018 and December 31, 2019, the Company used $18.4 million and $20.8 million of cash in its operating activities, respectively. As of December 31, 2019, the Company had cash, cash equivalents and short-term marketable securities of $28.3 million. Historically, the Company's activities have been financed through private placements of equity securities and debt. The Company's history of recurring losses, negative cash flows since inception and the need to raise additional funding to finance its operations raise substantial doubt about Company's ability to continue as a going concern. The Company's ability to continue as a going concern requires that the Company obtains sufficient funding to finance its operations. In the event the Company does not complete an IPO, the Company plans to continue to fund its operations and capital funding needs through a combination of private equity offerings, debt financings and other sources, including potential collaborations, licenses and other similar arrangements. If the Company is not able to secure adequate additional funding when needed, the Company will need to reevaluate its operating plan and may be forced to make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, or suspend or curtail planned programs or cease operations entirely. These actions could materially impact the Company's business, results of operations and future prospects. There can be no assurance as to the availability or terms upon which such financing and capital might be available in the future. Having insufficient funds may also require the Company to delay, scale back or eliminate some or all of its development programs or relinquish rights to its technology on less favorable terms than it would otherwise choose. The foregoing actions and circumstances could materially impact the Company's business, results of operations and future prospects.

Therefore, there is substantial doubt about the entity's ability to continue as a going concern within one year after the date that the financial statements are issued. The accompanying consolidated financial statements have been prepared assuming the Company will continue to operate as a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business. They do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from uncertainty related to its ability to continue as a going concern.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared using accounting principles generally accepted in the United States of America ("GAAP").

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Unaudited Pro Forma Information

The unaudited pro forma information as of December 31, 2019 has been prepared to give effect to (1) the exercise of the convertible preferred stock warrants into 2,138,748 shares of Series C-1 convertible preferred stock for $2.3 million in January and February 2020; (2) the automatic conversion of all shares of the outstanding convertible preferred stock on a one-to-one basis into 175,832,872 shares of common stock and the automatic conversion of convertible preferred stock issued as a result of the exercise of the convertible preferred stock warrants discussed in (1) above on a one-to-one basis into 2,138,748 shares of common stock, all of which will occur immediately upon the consummation of the Company's Qualified IPO (as defined in Note 10); and (3) the filing of our amended and restated certificate of incorporation in connection with the closing of this offering. The unaudited pro forma information does not assume any proceeds from, or the issuance of shares, in the Qualified IPO.

The unaudited pro forma basic and diluted net loss per share has been computed to give effect to (1) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation for the automatic conversion of the convertible preferred stock into shares of common stock as of the beginning of the respective period or the date of issuance, if later, (2) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation for the exercise of the convertible preferred stock warrants into shares of convertible preferred stock and further automatic conversion into shares of common stock as of the beginning of the respective period or the date of issuance, if later and (3) an adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to remove gains or losses resulting from the remeasurement of the convertible preferred stock warrant liability.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions.

Significant estimates and assumptions include reserves and write-downs related to inventories, the recoverability of long term assets, valuation of equity instruments and equity-linked instruments, valuation of common stock, stock-based compensation, valuation of the convertible preferred stock warrant liability and derivative liability, intangible assets, goodwill, debt and related features, deferred tax assets and related valuation allowances and impact of contingencies.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments consisting of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate fair value due to their relatively short maturities. The convertible preferred stock warrant liability and derivative liability are carried at fair value based on unobservable market inputs. Based on the borrowing rates currently available to the Company for debt with similar terms and consideration of default and credit risk, the carrying value of the term loan and convertible note payable to related party approximates their fair value. The fair value of marketable debt securities is estimated using Level 2 inputs based on their quoted market values (Note 4).

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents, which include money market funds.

Short-Term Marketable Securities

The Company determines the appropriate classification of its investments in marketable securities at the time of purchase and reevaluates such designation at each balance sheet date. The Company has classified and accounted for its marketable securities as available-for-sale. After consideration of the Company's risk versus reward objectives and liquidity requirements, the Company may sell these securities prior to their stated maturities. As the Company views these securities as available to support current operations, the Company classifies highly liquid securities with original maturities greater than three months at the time of purchase as short-term marketable securities on the balance sheet. These securities are carried at fair value as determined based upon quoted market prices or pricing models for similar securities. Unrealized gains and losses on available for sale debt securities, if any, are excluded from earnings and are reported as a component of accumulated other comprehensive income (loss). The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the statements of operations and comprehensive loss. Realized gains and losses, if any, on available-for-sale securities are included in other income (expense), net. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income. There were no short-term marketable securities as of December 31, 2018. The Company did not identify any of its short-term marketable securities as other-than-temporarily impaired as of December 31, 2019.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of risk consist principally of cash, cash equivalents and accounts receivable. The Company maintains its cash and cash equivalents balances with established financial institutions and, at times, such balances with any one financial institution may be in excess of the Federal Deposit Insurance Corporation ("FDIC") insured limits. As of December 31, 2019 and 2018, the Company also had cash on deposit with foreign banks of approximately $5.2 million and $2.2 million, respectively, that was not federally insured.

The Company earns revenue from the sale of its products to distributors and other customers such as hospitals. Sales of Zephyr Valves and delivery catheters accounted for most of our revenue for the years ended December 31, 2019 and 2018. The Company's accounts receivable are derived from revenue earned from distributors and customers. The Company performs ongoing credit evaluations of its customers' and distributors' financial condition and generally requires no collateral from its customers and distributors. At December 31, 2018 and December 31, 2019, no customer or distributor accounted for more than 10% of accounts receivable or revenue.

The Company relies on single source suppliers for the components, sub-assemblies and materials for its products. These components, sub-assemblies and materials are critical and there are no or relatively few alternative sources of supply. The Company's suppliers have generally met the Company's demand for their products and services on a timely basis in the past.

Deferred Offering Costs

Deferred offering costs, consisting of legal, accounting and other fees and costs relating to the Company's planned IPO, are capitalized and recorded on the balance sheet. The deferred offering costs will be offset against the proceeds received upon the closing of the planned IPO. In the event that the Company's plans for an IPO are terminated, all of the deferred offering costs will be written off within operating expenses in the Company's statements of operations and comprehensive loss. There were no deferred offering costs capitalized as of December 31, 2018. As of December 31, 2019, $1.6 million of deferred offering costs were recorded on the consolidated balance sheet.

Accounts Receivable and Allowances

Accounts receivable are recorded at the amounts billed less estimated allowances for doubtful accounts. The Company continually monitors customer payments and maintains an allowance for estimated losses resulting from a customer's inability to make required payments. Company considers factors such as historical experience, credit quality, age of the accounts receivable balances, geographic related risks and economic conditions that may affect a customer's ability to pay. As of December 31, 2018 and December 31, 2019, accounts receivable is presented net of an allowance for doubtful accounts of less than $0.1 million.

Inventories

Inventories are valued at the lower of cost to purchase or manufacture the inventory or net realizable value. Cost is determined using the first-in, first-out method ("FIFO") for all inventories. Net realizable value is determined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The Company records write-downs of inventories which are obsolete or in excess of anticipated demand or market value based on consideration of product lifecycle stage, technology trends, product development plans and assumptions about future demand and market conditions. Inventory write-downs reduce the carrying value of inventory to its net realizable value.

Property and Equipment, Net

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, generally between three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or useful economic life of the asset. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet, and any resulting gain or loss is reflected in operations in the period realized.

Impairment of Long-lived Assets

The Company evaluates its long-lived assets for indicators of possible impairment by comparison of the carrying amounts to future net undiscounted cash flows expected to be generated by such assets when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Should an impairment exist, the impairment loss would be measured based on the excess carrying value of the asset over the asset's fair value or discounted estimates of future cash flows. The Company has not identified any such impairment losses to date.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of net tangible and identified intangible assets acquired in a business combination. Goodwill is not amortized but is evaluated at least annually for impairment or when a change in facts and circumstances indicate that the fair value of the goodwill may be below its carrying value.

The Company tests goodwill for impairment at the reporting unit level ("Reporting Unit"). The Company has determined that it has only one operating segment and one Reporting Unit. The operating results are reviewed only on a consolidated basis to make decisions about resources to be allocated and assess performance. Accordingly, goodwill is tested for impairment in a two-step process. First, the Company determines if the carrying amount of the Reporting Unit exceeds the fair value of the Reporting Unit, which may initially indicate that goodwill could be impaired. If the Company determines that such impairment could have occurred, the Company performs step two and compares the implied fair value of the goodwill to its carrying amount to determine the impairment loss, if any. Estimations and assumptions regarding the future performance and results of the Company's operations, including estimates related to future sales growth, gross margin and operating expenses, and the fair value of the Company's common stock are used in the impairment assessment. Circumstances that could reasonably be expected to negatively affect the key assumptions related to the impairment assessment include but are not limited to, (1) a

significant adverse change in legal factors affecting our existing and future products or in business climate, (2) unanticipated competition, (3) an adverse action or assessment by a regulator, or (4) an adverse change in market conditions that are indicative of a decline in the fair value of the assets.

Intangible Assets

Intangible assets consist of developed technology and trademarks. Intangible assets were recorded at their fair values at the date of acquisition and are amortized using the straight-line method over a 15-year useful life (Note 5).

Leases

The Company leases its facilities and vehicles and meets the requirements to account for these leases as operating leases. The Company recognizes rent expense on a straight-line basis over the non-cancelable lease term. Where leases contain escalation clauses, rent abatements or concessions, such as rent holidays and landlord or tenant incentives or allowances, the Company applies them in the determination of straight-line rent expense over the lease term.

As of December 31, 2018, the Company records the difference between the rent paid and the straight-line rent as a deferred rent liability. As of December 31, 2018, leasehold improvements funded by landlord incentives or allowances are recorded as leasehold improvement assets and a corresponding deferred rent liability. The leasehold improvement asset is amortized over the lesser of the term of the lease or life of the asset. The deferred rent liability is amortized on a straight-line basis as a reduction to rent expense over the term of the lease agreement.

Upon adoption of ASC 842, Leases, on January 1, 2019, the Company determined if an arrangement is a lease, or contains a lease, at inception. The asset component of the Company's operating leases is recorded as right-of-use assets, and the liability component is recorded as current lease liabilities and long-term lease liabilities in the Company's consolidated balance sheets. As of December 31, 2019, the Company did not record any finance leases. ROU assets and lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate, which is the estimated rate we would be required to pay for a fully collateralized borrowing equal to the total lease payments over the term of the lease, to determine the present value of future minimum lease payments. The ROU asset also includes any lease payments made to the lessor at or before the commencement date, minus lease incentives received, and initial direct costs incurred. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term. For lease agreements entered into or reassessed after the adoption of ASC 842, the Company combines lease and non-lease components. Variable lease payments are expenses as incurred.

Assumptions made by the Company at the commencement date are re-evaluated upon occurrence of certain events, including a lease modification. A lease modification results in a separate contract when the modification grants the lessee an additional right of use not included in the original lease and when lease payments increase commensurate with the standalone price for the additional right of use. When a lease modification results in a separate contract, it is accounted for in the same manner as a new lease.

Convertible Preferred Stock

The Company records all shares of convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in certain events considered not solely within the Company's control, such as a merger, acquisition or sale of all or substantially all of the Company's assets (each, a "deemed liquidation event"), the convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. The Company has not adjusted the carrying values of the convertible preferred stock to its liquidation preference because a deemed liquidation event obligating the Company to pay the liquidation preferences to holders of shares of convertible preferred stock is not probable. Subsequent adjustments to the

carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

Convertible Preferred Stock Warrants

The Company's convertible preferred stock warrants require liability classification and accounting as the underlying convertible preferred stock is considered contingently redeemable and may obligate the Company to transfer assets to the holders at a future date upon occurrence of a deemed liquidation event. The convertible preferred stock warrants are recorded at fair value upon issuance and are subject to remeasurement to fair value at each balance sheet date, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss. The Company will continue to adjust the convertible preferred stock warrant liability for changes in fair value until the earlier of the exercise or expiration of the convertible preferred stock warrants, occurrence of a deemed liquidation event or conversion of convertible preferred stock into common stock.

If all outstanding shares of the series of convertible preferred stock for which the convertible preferred stock warrants are exercisable for are converted to shares of common stock or any other security, then thereafter (a) the convertible preferred stock warrants shall become exercisable for such number of shares of common stock or such other security as is equal to the number of shares of common stock or such other security that each share of convertible preferred stock was converted into, multiplied by the number of shares subject to the convertible preferred stock warrants immediately prior to such conversion, and (b) the exercise price of the convertible preferred stock warrants shall automatically be adjusted to equal to the number obtained by dividing (1) the aggregate exercise price for which the convertible preferred stock warrants were exercisable immediately prior to such conversion by (2) the number of shares of common stock or such other security for which the convertible preferred stock warrants are exercisable immediately after such conversion.

Revenue Recognition

The Company's revenue is generated from the sale of its products to distributors and hospitals in the United States and international markets.

On January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers*, using the full retrospective method. In connection with the adoption of ASC 606, the Company also adopted the related amendments that impact the accounting for the incremental costs of obtaining a contract.

Under ASC 606, revenue is recognized when the customer obtains controls of promised goods or services, in an amount that reflects consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the Company performs the following five steps as prescribed by ASC 606:

(i) identify the contract(s) with a customer;

(ii) identify the performance obligations in the contract;

(iii) determine the transaction price;

(iv) allocate the transaction price to the performance obligations in the contract; and

(v) recognize revenue when (or as) the entity satisfies performance obligations.

A contract with a customer exists when (i) the Company enters into a legally enforceable contract with a customer that defines each party's rights regarding the products or services to be transferred and identifies the payment terms related to these products or services, (ii) the contract has commercial substance and, (iii) the Company determines that collection of substantially all consideration for products or services that are transferred is probable based on the

customer's intent and ability to pay the promised consideration. The Company identifies performance obligations in contracts with customers, which may include its products and implied promises to provide free products and analysis services for patient scans. The transaction price is determined based on the amount expected to be entitled to in exchange for transferring the promised services or product to the customer. The Company is entitled to the total consideration for the products ordered by customers, net of early pay discounts, volume rebate adjustments and other transaction price adjustments. The Company's payment terms to customers generally range from 30 to 60 days. Payment terms fall within the one-year guidance for the practical expedient which allows the Company to forgo adjustment of the promised amount of consideration for the effects of a significant financing component. The Company excludes taxes assessed by governmental authorities on revenue-producing transactions from the measurement of the transaction price.

Assuming all other revenue recognition criteria are met, revenue is recognized when control of the Company's products transfers to the customer. For sales where the Company's sales representative hand delivers product directly to the hospital or medical center control transfers to the customer upon this delivery. For sales where products are shipped, control is transferred either upon shipment or delivery of the products to the customer, depending on the shipping terms and conditions. For consignment sales, control is transferred when the products are used by the customer in procedures. The Company defers revenue relating to any remaining performance obligations by the Company to the customer after delivery, such as free products and free analysis services of patient scans to determine suitability of the patients for the treatment using the Company's Zephyr Valves. As permitted under the practical expedient, the Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less.

The Company accepts product returns at its discretion or if the product is defective as manufactured. Historically, the actual product returns have been immaterial to the Company's financial statements. The Company elected to treat shipping and handling costs as a fulfillment cost and include them in the cost of goods sold as incurred. In those cases where the Company bills shipping and handling costs to customers, it will classify the amounts billed within revenue.

The Company disaggregates its revenue by major geographic region, which has been disclosed in Note 13, "Segment Information".

The Company's contract liabilities consist of deferred revenue for remaining performance obligations by the Company to the customer after delivery, which was $0.1 million and $0.2 million as of December 31, 2018 and December 31, 2019. The deferred revenue as of December 31, 2017 was $0.2 million, which was recognized as revenue during the year ended December 31, 2018. The deferred revenue as of December 31, 2018 of $0.1 million, which was recognized as revenue during the year ended December 31, 2019.

The Company elected the following practical expedients allowed upon adoption of ASC 606:

(i) The Company did not restate contracts that began and were completed within the same annual reporting period;

(ii) For completed contracts that have variable consideration, the Company used the transaction price at the date the contract was completed rather than estimating variable consideration amounts in the comparative reporting periods;

(iii) For all reporting periods presented before the date of initial application, the Company did not disclose the amount of the transaction price allocated to the remaining performance obligations and when the Company expects to recognize that amount as revenue; and

(iv) For contracts that were modified before the beginning of the earliest reporting period presented in accordance with ASC 606, the Company did not retrospectively restate the contract for those contract modifications. Instead, the Company reflected the aggregate effect of all modifications that occurred before the beginning of the earliest period presented in accordance with ASC 606 when:

i. Identifying satisfied and unsatisfied performance obligations;

ii. Determining the transaction price; and

iii. Allocating the transaction price to the satisfied and unsatisfied performance obligations.

The Company recognized the cumulative effect of initially applying ASC 606 as an adjustment to the opening balance of accumulated deficit.

Costs associated with product sales include commissions. The Company applies the practical expedient and recognizes commissions as expense when incurred because the expense is incurred at a point in time and the amortization period is less than one year. Commissions are recorded as selling expense.

Cost of Goods Sold

The Company manufactures certain products at its facility and purchases other products from third party manufacturers. Cost of goods sold consists primarily of costs related to materials, components and subassemblies, third-party costs, manufacturing overhead costs, direct labor, reserves for excess, obsolete and non-sellable inventories as well as distribution-related expenses. A significant portion of the Company's cost of goods sold currently consists of manufacturing overhead costs. These overhead costs include the cost of quality assurance, material procurement, inventory control, facilities, equipment and operations supervision and management. Cost of goods sold also includes depreciation expense for production equipment and certain direct costs such as shipping costs.

Research and Development

Research and development expenses consist of compensation costs, stock-based compensation, engineering and research expenses, clinical trials and related expenses, regulatory expenses, manufacturing expenses incurred to build products for testing, allocated facilities costs, consulting fees and other expenses incurred to sustain the Company's overall research and development programs. All research and development costs are expensed as incurred.

Clinical trial costs are a significant component of the Company's research and development expenses. The Company has a history of contracting with third parties that perform various clinical trial activities on the Company's behalf in the ongoing development of its product candidates. The financial terms of these contracts are subject to negotiations and may vary from contract to contract and may result in uneven payment flow. The Company accrues and expenses costs for its clinical trial activities performed by third parties, including clinical research organizations and other service providers, based upon estimates of the work completed over the life of the individual study in accordance with associated agreements. The Company determines these estimates through discussion with internal personnel and outside service providers as to progress or stage of completion of trials or services pursuant to contracts with clinical research organizations and other service providers and the agreed-upon fee to be paid for such services.

Advertising Costs

The Company expenses the costs of advertising as incurred. Advertising expenses were $0.1 million and $0.6 million for the years ended December 31, 2018 and December 31, 2019, respectively.

Foreign Currency Translation and Transaction Gains and Losses

The functional currencies of the Company's wholly owned subsidiaries in the Cayman Islands and the Netherlands are the U.S. dollar. The functional currencies of the Company's wholly owned subsidiaries in Switzerland, Germany, Australia, the United Kingdom, France and Hong Kong are the Swiss franc. The functional currency of the Company's subsidiary in Italy is the Euro. Accordingly, asset and liability accounts of Switzerland, Germany, Australia, the United Kingdom, Italy and Hong Kong operations are translated into U.S. dollars using the current exchange rate in effect at the balance sheet date and equity accounts are translated into U.S. dollars using historical rates. The revenues and expenses are translated using the average exchange rates in effect during the period, and gains and losses from foreign currency translation adjustments are included as a component of accumulated other comprehensive income in the consolidated balance sheet. Foreign currency translation adjustments are recorded in other comprehensive income (loss) in the consolidated statements of operations and comprehensive loss and was $0.1 million and less than $0.1 million during the years ended December 31, 2018 and December 31, 2019, respectively.

Foreign currency transaction gains and losses are included in other income (expense), net in the consolidated statements of operations and comprehensive loss and was $0.3 million and $0.1 million during the years ended December 31, 2018 and December 31, 2019, respectively.

Stock-Based Compensation

The Company accounts for stock-based compensation arrangements with employees in accordance with ASC 718, *Compensation—Stock Compensation*, using a fair-value based method. The Company determines the fair value of stock options on the date of grant using the Black-Scholes option pricing model. The Company's determination of the fair value of stock options is impacted by its common stock price as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, the expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop.

The fair value of time-based awards is recognized over the period during which an option holder is required to provide services in exchange for the option award, known as the requisite service period, which is typically the vesting period using the straight-line method. The fair value of performance-based awards is recognized over the requisite service period using the graded vesting method. Upon the adoption of Accounting Standards Update ("ASU") 2016-09 for periods after January 1, 2018, the Company no longer records estimated forfeitures on share-based awards and, instead, have elected to record forfeitures as they occur.

The Company issued stock options in exchange for the receipt of goods or services from non-employees. Costs for such equity instruments are measured at the fair value of the equity instruments issued on the measurement date as the Company believes that the fair value of the equity instrument is more reliably measured than the fair value of the services received. Up to December 31, 2018, the value of equity instruments issued to non-employees was determined on the earlier of the date on which there first existed a firm commitment for performance by the provider of goods and services or on the date performance is complete, using the Black-Scholes option pricing model. Therefore, the measurement of stock-based compensation issued to non-employees was subject to periodic adjustment as the underlying equity instruments vested. Stock-based compensation expense related to stock options granted to non-employees was recognized as the stock options are earned. Upon adoption of ASU 2018-07 for the periods after January 1, 2019, the Company accounts for shared-based awards granted to non-employees based on the fair value on the date of grant and recognizes compensation expense for those awards over the requisite service period, which is generally the vesting period of the respective award.

Income Taxes

The Company accounts for income taxes under the liability method, whereby deferred tax assets and liabilities are determined based on the difference between the consolidated financial statements and tax bases of assets and liabilities using the enacted tax rates in effect for the year in which the differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets when management estimates, based on available objective evidence, that it is more likely than not that the benefit will not be realized for the deferred tax assets.

The Company also follows the provisions of ASC 740-10, *Accounting for Uncertainty in Income Taxes*. ASC 740-10 prescribes a comprehensive model for the recognition, measurement, presentation and disclosure in financial statements of any uncertain tax positions that have been taken or expected to be taken on a tax return. No liability related to uncertain tax positions is recorded on the consolidated financial statements. It is the Company's policy to include penalties and interest expense related to income taxes as part of the provision for income taxes.

Net Loss per Share Attributable to Common Stockholders

Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common stock outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, convertible preferred stock, stock options, common stock subject to repurchase related to early exercise of stock options, convertible preferred stock warrants and convertible note are considered to be potentially dilutive securities. Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities as the convertible preferred stock is considered a participating security because it participates in dividends with common stock. The Company also considers the shares issued upon the early exercise of stock options subject to repurchase to be participating securities, because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The holders of all series of convertible preferred stock and the holders of the shares issued upon early exercise of stock options subject to repurchase do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per common share is the same as basic net loss per common share for those periods.

Comprehensive Loss

The Company is required to report all components of comprehensive loss, including net loss, in the financial statements in the period in which they are recognized. Comprehensive loss is defined as a change in equity of a business enterprise during a period, resulting from transactions and other events and circumstances from non-owner sources. The Company's currency translation adjustment and unrealized gains and losses from marketable securities are the components of other comprehensive loss that are excluded from the reported net loss for all periods presented.

3. Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In June 2018, Financial Accounting Standards Board ("FASB") issued ASU 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Non-employee Share-Based Payment Accounting.* This ASU aligns the measurement and classification guidance for share-based payments to non-employees with the guidance for share based payment to employees. Under this ASU, the measurement of equity-classified non-employee awards will be fixed at the grant date, which may lower their cost and reduce volatility in the statements of operations and comprehensive loss. The transition method provided by this ASU is on a modified retrospective basis, which recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. This

ASU is effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted, but may take place no earlier than a company's adoption date of ASC 606, *Revenue from Contracts with Customers*. The Company adopted ASU 2018-07 as of January 1, 2019 and the adoption did not have a material impact on the Company's consolidated financial statements.

In July 2017, FASB issued ASU 2017-11, *Earnings Per Share (Topic 260) Distinguishing Liabilities from Equity (Topic 480) Derivatives and Hedging (Topic 815) (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. This ASU simplifies the accounting for certain financial instruments with down round features, a provision in an equity-linked financial instrument (or embedded feature) that provides a downward adjustment of the current exercise price based on the price of future equity offerings. Down round features are common in warrants, preferred shares and convertible debt instruments issued by private companies and early-stage public companies. This ASU requires companies to disregard the down round feature when assessing whether the instrument is indexed to its own stock, for purposes of determining liability or equity classification. For public business entities, the amendments in Part I of this ASU are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The amendments in Part I should be applied (1) retrospectively to outstanding financial instruments with a down round feature by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the first fiscal year and interim periods; (2) retrospectively to outstanding financial instruments with a down round feature for each prior reporting period presented. The amendments in Part II of this ASU do not require any transition guidance because those amendments do not have an accounting effect. The Company adopted ASU 2017-11 as of January 1, 2019 and the adoption had no impact on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.* This ASU requires changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted. This ASU requires adoption on a retrospective basis. The Company adopted ASU 2016-15 as of January 1, 2018 and the adoption had no impact on the Company's consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Stock Compensation – Improvements to Employee Share-Based Payment Accounting*. The amendments in this ASU are intended to simplify several areas of accounting for share-based compensation arrangements, including the income tax consequences, classification on the consolidated statement of cash flows and treatment of forfeitures. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company adopted ASU 2016-09 as of January 1, 2018 and the adoption had no material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842) ("ASC 842")*, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). In July 2018, the FASB issued ASU 2018-10, Codification Improvements to Topic 842, Leases, which provides clarification to ASU 2016-02. In March 2019, the FASB issued ASU 2019-01, which provides clarification on implementation issues associated with adopting ASU 2016-02. These ASUs (collectively the "new leasing standard") requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. ASC 842 provides a lessee with an option to not account for leases with a term of 12 month or less as leases in the scope of the new standard. ASC 842 supersedes the previous leases standard, ASC 840, *Leases*. The new leasing standard is effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842): Targeted Improvements, which allows entities to elect an optional transition method where entities may continue to apply the existing lease

guidance during the comparative periods and apply the new lease requirements through a cumulative effect adjustment in the period of adoption rather than in the earliest period presented. The Company adopted ASU 842 using the modified retrospective approach as of January 1, 2019. Results for reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts are not adjusted and continue to be reported in accordance with our historical accounting under Topic 840. The Company elected the package of practical expedients permitted under the transition guidance within Topic 842, which allowed us to carry forward the historical lease classification, retain the initial direct costs for any leases that existed prior to the adoption of the standard and not reassess whether any contracts entered into prior to the adoption are leases. The Company also elected to account for lease and non-lease components in our lease agreements as a single lease component in determining lease assets and liabilities. In addition, the Company elected not to recognize the right-of-use assets and liabilities for leases with lease terms of one year or less. The Company recognized right-of-use assets of $1.2 million and lease liabilities of $1.3 million for its operating leases as of January 1, 2019, and eliminated deferred rent of $0.1 million. The adoption of these ASUs did not have any impact on the statements of operations and comprehensive loss and statements of cash flows. The additional disclosures required by the new standard have been included in Note 2, “Summary of Significant Accounting Policies” and Note 7, “Leases, Lease Commitments, and Contingencies”.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which will supersede most current revenue recognition guidance. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. The guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. The guidance also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity’s contracts with customers. Since May 2014, the FASB has issued several amendments to the standard. This new standard is effective for public business entities for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted. The guidance permits the use of either a retrospective or cumulative effect transition method. The Company adopted ASU 2014-09 using the full retrospective method as of January 1, 2018. The additional disclosures required by the new standard have been included in Note 2, “Summary of Significant Accounting Policies.”

Recent Accounting Pronouncements Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. This ASU is effective for public business entities for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. The Company is evaluating the impact of the adoption of ASU 2019-12 on its financial statements.

In August 2018, FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU amends the disclosure requirement in ASC 820, *Fair Value Measurement*, by adding, changing or removing certain disclosures. This ASU applies to all entities that are required under this guidance to provide disclosure about recurring or nonrecurring fair value measurements. The amendments require new disclosures related to: changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period; range and weighted-average of significant unobservable inputs used to develop Level 3 fair value measurements. In addition, there are certain changes in disclosure requirements in the existing guidance. For all entities, this ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this standard will have on its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other: Simplifying the Test for Goodwill Impairment*. The amendments eliminate Step 2 from the goodwill impairment test. The annual, or interim, goodwill impairment test is performed by comparing the fair value of a reporting unit with its carrying amount. An

impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. In addition, income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit should be considered when measuring the goodwill impairment loss, if applicable. The amendments also eliminate the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. This ASU is effective for public business entities for its annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this standard will have on its consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses*. This new guidance will require financial instruments to be measured at amortized cost, and trade accounts receivable to be presented at the net amount expected to be collected. The new model requires an entity to estimate credit losses based on historical information, current information and reasonable and supportable forecasts, including estimates of prepayments. In November 2019, the FASB issued ASU 2019-10, according to which, the new standard is effective for public business entities that meet the definition of an SEC filer, excluding entities eligible to be smaller reporting companies ("SRC") as defined by the SEC, for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. For all other entities , the new standard is effective for fiscal years beginning after December 15, 2022, and interim periods within that fiscal year. Early adoption is permitted. The Company is a SRC for fiscal year 2019. The Company is currently evaluating the impact of the new standard on its consolidated financial statements.

4. Fair Value Measurements

Assets and liabilities recorded at fair value in the consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels which are directly related to the amount of subjectivity associated with the inputs to the valuation of these assets or liabilities are as follows:

Level 1 – Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access as of the measurement date.

Level 2 – Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities;

Level 3 – Unobservable inputs for the asset or liability only used when there is little, if any, market activity for the asset or liability at the measurement date. This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value.

Assets and Liabilities Measured and Recorded at Fair Value on a Recurring Basis – Financial assets and liabilities held by the Company measured at fair value on a recurring basis include money market funds, short-term marketable securities, convertible preferred stock warrant liability and derivative liability.

Assets and Liabilities Measured and Recorded at Fair Value on a Nonrecurring Basis – The Company determines the fair value of long-lived assets held and used, such as intangible assets, by reference to independent appraisals, quoted market prices (e.g. an offer to purchase) and other factors. An impairment charge is recorded when the carrying value of the asset exceeds its fair value. As noted above, there have been no impairment charges recorded to date. Based on the borrowing rates currently available to the Company for debt with similar terms and consideration of default and credit risk, the carrying value of the term loan and convertible note payable to related party approximates their fair value and is classified as a Level 2 liability.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

The following tables summarizes the types of assets and liabilities measured at fair value on a recurring basis by level within the fair value hierarchy (in thousands):

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 51	$ —	$ —	$ 51
Total financial assets	51	—	—	51
Liabilities:				
Preferred stock warrant liability	—	—	12	12
Derivative liability	—	—	642	642
Total financial liabilities	$ —	$ —	$ 654	$ 654

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 6,318	$ —	$ —	$ 6,318
Commercial paper	—	1,000	—	1,000
Cash equivalents	6,318	1,000	—	7,318
Corporate bonds	—	7,105	—	7,105
Commercial paper	—	6,475	—	6,475
Short-term marketable securities	—	13,580	—	13,580
Total financial assets	$ 6,318	$ 14,580	$ —	$ 20,898
Liabilities:				
Preferred stock warrant liability	$ —	$ —	$ —	$ —
Derivative liability	—	—	1,165	1,165
Total financial liabilities	$ —	$ —	$ 1,165	$ 1,165

The following table summarizes the cost, unrealized gains and losses and fair value of marketable securities (in thousands):

	December 31, 2019			
	Amortized Cost	Unrealized Losses	Unrealized Gains	Fair Value
Corporate bonds	$ 7,103	$ —	$ 2	$ 7,105
Commercial paper	7,471	—	4	7,475
Marketable securities	$ 14,574	$ —	$ 6	$ 14,580
Amounts recognized on the consolidated balance sheet				
Cash equivalents				$ 1,000
Short-term marketable securities				13,580
Marketable securities				$ 14,580

Accrued interest on marketable securities of $0.1 million is included in prepaid expenses and other current assets on the consolidated balance sheet.

The Company values the convertible preferred stock warrant liability (Note 9) using the Black-Scholes Merton option-pricing model. The expected term for these warrants is based on the remaining contractual life of these warrants. The expected volatility assumption was determined by examining the historical volatility for industry peers, as the Company does not have a trading history for its common stock. The risk-free interest rate assumption is based on U.S. Treasury investments whose term is consistent with the expected term of the warrants. The expected dividend assumption is based on the Company's history and expectation of dividend payouts.

The fair value of the Series C-1 convertible preferred stock warrants was determined using the following assumptions:

	December 31,	
	2018	2019
Risk-free interest rate	2.6%	1.6%
Remaining contractual life (in years)	1.1	0.1
Dividend yield	0%	0%
Volatility	46.0%	57.5%

The derivative liability is associated with the Company's Success Fee Agreement with Oxford Finance LLC (Note 6). The Company values this derivative liability based on the Success Fee amount of $1.9 million and the probability and estimated timing of a liquidity event. The probability of occurrence of a Liquidity Event was estimated to be up to 40% and 65% before the expiration of the agreement as of December 31, 2018 and December 31, 2019, respectively. Changes in the estimated probability may result in an increase or decrease in the fair value of the derivative liability.

The change in fair value of the convertible preferred stock warrant liability and derivative liability is summarized below (in thousands):

	Convertible Preferred Stock Warrant Liability	Derivative Liability
Beginning fair value, January 1, 2018	$ —	$ —
Change in fair value	12	642
Ending fair value, December 31, 2018	$ 12	$ 642
Beginning fair value, January 1, 2019	12	642
Change in fair value	(12)	523
Ending fair value, December 31, 2019	$ 0	$ 1,165

5. Balance Sheet Components

Cash and Cash Equivalents

The Company's cash and cash equivalents consist of the following (in thousands):

	December 31,	
	2018	2019
Cash	$ 4,073	$ 7,449
Cash equivalents:		
Money market funds	51	6,318
Commercial paper	—	1,000
Total cash and cash equivalents	$ 4,124	$ 14,767

Inventory

Inventory consists of the following (in thousands):

	December 31,	
	2018	2019
Raw materials	$ 811	$ 1,950
Work in process	100	180
Finished goods	2,409	3,482
Total inventory	$ 3,320	$ 5,612

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following (in thousands):

	December 31,	
	2018	2019
Prepaid expenses	$ 146	$ 436
Prepaid insurance	172	12
VAT receivable	471	387
Other current assets	125	766
Total prepaid expenses and other current assets	$ 914	$ 1,601

Property and Equipment, Net

Property and equipment, net consist of the following (in thousands):

	December 31,	
	2018	2019
Machinery and equipment	$ 1,068	$ 1,269
Computer equipment and software	813	848
Furniture and fixtures	233	168
Leasehold improvements	6	57
Total	2,120	2,342
Less: accumulated depreciation	(1,745)	(1,440)
Property and equipment, net	$ 375	$ 902

Depreciation expense for the years ended December 31, 2018 and December 31, 2019 was $0.1 million and $0.2 million, respectively.

Goodwill

Goodwill was $2.3 million as of December 31, 2018 and December 31, 2019 arising from the Company's acquisition of Emphasys Medical, Inc, in March 2009. No goodwill impairment losses have been recognized since the acquisition. There were no acquisitions or dispositions of goodwill in 2018 and 2019. The Company performed an annual test for goodwill impairment in the fourth quarter of the fiscal years ended December 31, 2018 and December 31, 2019 and determined that goodwill was not impaired.

Intangible Assets

Intangible assets consist of the following (in thousands):

	December 31, 2018		
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Developed technology	$ 1,658	$ (1,078)	$ 580
Trademarks	191	(124)	67
Total intangible assets	$ 1,849	$ (1,202)	$ 647

	December 31, 2019		
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Developed technology	$ 1,658	$ (1,188)	$ 470
Trademarks	191	(137)	54
Total intangible assets	$ 1,849	$ (1,325)	$ 524

Amortization expense relating to the intangibles totaled $0.1 million during 2018 and 2019, respectively.

Future amortization expense is as follows (in thousands):

Year Ending December 31,	
2020	$ 123
2021	123
2022	123
2023	123
2024	32
Total amortization expense	$ 524

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2018	2019
Accrued employee bonuses	$ 1,771	$ 3,064
Accrued vacation	830	1,098
Other accrued personnel related expenses	562	705
Accrued professional fees	338	1,342
Accrued interest	1,313	1,708
Sales taxes, franchise tax and VAT	682	762
Other	380	784
Total accrued liabilities	$ 5,876	$ 9,463

6. Long Term Debt and Convertible Notes

Term Loan

In August 2014, the Company entered into a Loan and Security Agreement with Oxford Finance LLC for up to $20.0 million in term loans. In 2014, the Company borrowed $15.0 million and had the ability to draw an additional $5.0 million conditioned upon the achievement of a revenue milestone. The period during which the Company could draw an additional $5.0 million ended on November 30, 2015 without the Company borrowing the additional $5.0 million. The term loan bore interest at 8.96% and had a five-year term. The first 36 months were interest only payments followed by 24 months of equal payments of principal and interest. A final payment of 8.50% of the term loan amount is due at maturity and is being accreted using the effective interest rate method. The term loan is collateralized by assets, including cash and cash equivalents, accounts receivable and property and equipment.

In May 2017, the Company entered into a First Amendment to Loan and Security Agreement that extended the interest only period through June 2018 and included an additional fee of $0.1 million due upon maturity. The amendment was accounted for as a debt modification and no gain or loss is recognized in the Company's financial statements.

In May 2018, the Company entered into Second and Third Amendments to Loan and Security Agreement that extended the interest only period through May 2019 and the maturity date to July 1, 2020. The amendment was accounted for as a debt modification and no gain or loss is recognized in the Company's financial statements. The Company had the option to further extend the interest only period through March 2020 and the maturity date to May 1, 2021, provided that no event of default had occurred. The loan bears interest at an annual rate equal to the greater of (i) 8.71% and (ii) the sum of (a) the greater of the one month U.S. LIBOR rate on the last business day of the month that immediately precedes the month in which the interest will accrued and 1.85% plus (b) 6.86%. In May 2019, the Company elected to extend the interest only period of the term loan through March 2020 and the maturity date to May 2021. The incremental amendment fee, due at maturity, increased to $0.8 million from $0.4 million when the Company extended the interest only period through March 2020. As of December 31, 2018 and December 31, 2019, the term loan had an annual effective interest rate of 11.17% per year and 11.11% per year, respectively.

In connection with the original agreement in August 2014, the Company also entered into the Success Fee Agreement. In the event of a sale or other disposition by the Company of all or substantially all of its assets, a merger or consolidation, or an initial public offering (a "Liquidity Event"), before the termination of the agreement on August 28, 2021, the Company is required to pay up to $2.5 million (the "Success Fee") to Oxford Finance LLC. The Success Fee is equal to 6.25% of the term loan if the Liquidity Event occurs within 18 months of August 28, 2014, 8.75% if the Liquidity Event occurs after 18 months and within 3 years of August 28, 2014, and 12.50% if the Liquidity Event occurs after the third anniversary of August 28, 2014. As of December 31, 2018 and December 31, 2019, the maximum amount of Success Fee subject to a potential payout is $1.9 million. This agreement has been identified as a freestanding derivative under ASC 815, *Derivatives* and is remeasured to its fair value at the end of each reporting period and any change in fair value is recognized as change in other income (expense), net in the statements of operations and comprehensive loss (Note 4). The fair value of the derivative liability as of December 31, 2018 and December 31, 2019 was $0.6 million and $1.2 million, respectively.

The term loan consists of the following (in thousands):

	December 31,	
	2018	2019
Term loan	$ 15,000	$ 15,000
Less: debt issuance costs	(48)	(27)
Less: deferred financing costs	(15)	(8)
Term loan	$ 14,937	$ 14,965

As of December 31, 2019, future payments under term loan, including interest only payments and the final payment, are as follows (in thousands):

Year Ending December 31,	
2020	$ 10,699
2021	7,652
Total	18,351
Less: unamortized debt discount	(35)
Less: interest	(3,351)
Term loan	$ 14,965

The Company incurred fees and legal expenses of $0.1 million in connection with the Agreement and Amendments, which are recorded as deferred financing costs and amortized to interest expense. The Company also paid $0.2 million in fees to the lender which is reflected as a discount on the debt and is being accreted over the life of the term loan. In 2018 and 2019, the Company recorded interest expense related to deferred financing and debt issuance costs of less than $0.1 million.

Interest expense on the term loan amounted to $1.7 million and $1.7 million during the years ended December 31, 2018 and December 31, 2019, respectively. The Loan and Security Agreement contains customary affirmative and negative covenants and events of default. As of December 31, 2018, the Company was in compliance with all the covenants contained in the Loan and Security Agreement. As of December 31, 2019, the Company was in default with a covenant in the Loan and Security Agreement resulting from its failure to maintain cash balances outside the United States within the levels set forth in the Loan and Security Agreement. This event of default was waived by Oxford Finance LLC.

Convertible Note

In May 2017, the Company entered into a Second Lien Loan and Security Agreement with Boston Scientific Corporation, an investor, for up to $30.0 million in term loans. The loans under this agreement are subordinated to the term loan with Oxford Finance LLC and are also collateralized by assets, including cash and cash equivalents, accounts receivable and property and equipment. Under the Agreement, Boston Scientific Corporation agreed to make one or more term loans to the Company during the period beginning in May 2017 and ending on May 13, 2022, the maturity date (the “Term Loans”). The principal amount outstanding under the Term Loans drawn prior to June 30, 2018 accrued no interest from the date of such Term Loan through and including June 30, 2018. Beginning on July 1, 2018, all Term Loans accrued interest at a fixed rate of 8.96%. Interest accrues until such Term Loan is converted to stock or paid in full. Each Term Loan is evidenced by a separate Secured Convertible Promissory Note and is repayable, convertible and exchangeable.

If the Company completes any Qualified Equity or Debt Financing or any Change of Control, Liquidation or Prepayment Conversion occurs, outstanding principal and accrued interest on the loans are convertible at Boston Scientific Corporation’s option into shares of either (1) the Series F-1 convertible preferred stock or, if the shares of Series F-1 convertible preferred stock are not the most senior series of preferred stock of the Company then issued and outstanding (2) the most senior series of preferred stock of the Company then issued and outstanding (“Conversion Stock”). The Conversion Stock Per Share Price is defined as (A) with respect to a Qualified Equity Financing, the lowest price per share of Conversion Stock paid by any investor in such Qualified Equity Financing, (B) with respect to a Change of Control or Liquidation, the total amount distributed, paid or to be paid to the stockholders of the Company on account of the stock held by them in connection with such Change of Control or Liquidation, divided by the fully-diluted share count of the Company on the Conversion Date or (C) with respect to a Prepayment Conversion, $230,000,000 divided by the fully-diluted share count of the Company on the Conversion Date.

Subject to Boston Scientific Corporation’s conversion rights, the Company had the option to prepay all of the Term Loans, at any time.

In conjunction with the Second Lien Loan and Security Agreement, the Company and Boston Scientific entered into a No Shop Agreement such that from the date of execution of the agreement through the earlier of the Company’s submission of the final module of its Premarket Approval application to the FDA and March 31, 2018, the Company would not sign a term sheet or engage in discussions to sell the Company. In addition, Boston Scientific’s Right of First Negotiation, originally received as part of the Preferred Series F-1 financing, was amended to shorten the period it has to exercise its Right of First Negotiation from 10 to 5 business days, and to shorten the Exclusive Negotiation Period from 75 to 45 days with respect to the initial notice from the Company that it intends to pursue a change in control or IPO. For subsequent notices from the Company, Boston Scientific has 10 days to exercise its right of first negotiation, and 75 days to enter into definitive agreements for a change in control transaction.

The Company borrowed $6.0 million in 2017, $12.0 million in 2018 and $6.0 million in January 2019 under the Second Lien Loan and Security Agreement with Boston Scientific Corporation. At December 31, 2019, the Company retained the ability to draw up to an additional $6.0 million under the BSC Agreement until the maturity date in May 2022.

In April 2019, all the Term Loans and accrued interest of $25.1 million under the agreement converted into 19,039,350 shares of Series G-1 convertible preferred stock at a price of $1.32 per share at the option of Boston Scientific Corporation upon the occurrence of Series G-1 convertible preferred stock financing, which met the definition of Qualified Equity Financing in the Second Lien Loan and Security Agreement (Note 10). This conversion was accounted as debt extinguishment and the Company recognized less than $0.1 million extinguishment gain upon such conversion.

The convertible note consists of the following (in thousands):

	December 31,	
	2018	2019
Convertible note	$ 18,000	$ —
Less: debt issuance costs	(98)	—
Accrued interest	766	—
Convertible note payable to related party	$ 18,668	$ —

The Company incurred fees and legal expenses of $0.1 million in connection with the Agreement, which are reported on the balance sheet as a direct deduction from the face amount of the convertible note. Amortization of the issuance costs are calculated using the effective interest rate method over the term of the note and recorded as a non-cash interest expense. In 2018, the Company accrued interest expense of $0.8 million, which was included in convertible note payable to related party at December 31, 2018. As of December 31, 2018, the Term Loans had an annual effective interest rate of 7.47% per year.

The Second Lien Loan and Security Agreement contains customary affirmative and negative covenants and events of default. As of December 31, 2018 and December 31, 2019, the Company was in compliance with all the covenants contained in the Second Lien Loan and Security Agreement.

In January 2020, the Company terminated the Second Lien Loan and Security Agreement.

7. Leases, Lease Commitments and Contingencies

The Company has a lease for its headquarters location in Redwood City, California through July 2020. In October 2019, the Company renewed its lease for the headquarters location in Redwood City, California for an additional five years commencing in August 2020 and expiring in July 2025. The monthly base rent during the renewed term will be $0.1 million and is subject to an annual increase of 3.5%. The Company is responsible for its share of real estate taxes, common area maintenance and management fees. The Company will receive a tenant improvement allowance of $0.2 million on commencement of the renewal term in August 2020.

During 2013, the Company entered into a five-year lease for office facilities in Switzerland which expired in January 2018. In 2017, the Company amended the lease and extended the term through January 2020. The Company had an option to extend the lease through January 2022 by providing notice to the landlord by the end of January 2019, which was not exercised by the Company. Per lease terms, in the event the option to extend is not exercised, the lease remains in force and can be terminated with a 12-month’s notice.

The Company has leases on two vehicle leases with lease terms ranging from 2 to 4 years.

Rent expense for the year ended December 31, 2018 under ASC 840 was $1.0 million.

Operating lease cost consists of the following (in thousands):

	Year Ended December 31, 2019
Operating lease cost	$ 1,037
Short-term lease cost	13
Variable lease cost	234
Total lease cost	$ 1,284

The following table summarizes a maturity analysis of our lease liabilities showing the aggregate lease payments as of December 31, 2019 (in thousands):

Year Ending December 31,	
2020	$ 1,142
2021	1,536
2022	1,580
2023	1,636
2024	1,693
2025 and beyond	1,007
Total minimum lease payments	8,594
Less: Amount of lease payments representing interest	1,745
Present value of future minimum lease payments	$ 6,849
Less: Current lease liabilities	$ 446
Long-term lease liabilities	$ 6,403

The following table summarizes balance sheet and other information related to our operating leases as of December 31, 2019 (in thousands, except weighted average data):

Right of use asset	$ 6,561
Current lease liabilities	$ 446
Long-term lease liabilities	$ 6,403
Weighted average remaining lease term (years)	5.54
Weighted average discount rate (percent)	7.0

The following table summarizes other supplemental information related to our operating leases (in thousands):

Cash paid for amounts included in the measurement of lease liabilities included in cash flows used in operating activities	$ 893
Right-of-use assets obtained in exchange for lease liabilities	$ 7,316

Future minimum lease payments under the non-cancelable operating leases as of December 31, 2018 under ASC 840 are as follows (in thousands):

Year Ending December 31,		
2019	$	870
2020		489
Total minimum lease payments	$	1,359

Contingencies

From time to time, the Company may be a party to various litigation claims in the normal course of business. Legal fees and other costs associated with such actions are expensed as incurred. The Company assesses, in conjunction with legal counsel, the need to record a liability for litigation and contingencies. Accrual estimates are recorded when and if it is determinable that such a liability for litigation and contingencies are both probable and reasonably estimable.

In December 2018, a former distributor outside the United States filed suit alleging the Company's subsidiary, PulmonX International Sàrl, conducted unfair competitive practices and violated the exclusive distribution rights as a result of the subsidiary's termination of its distribution agreement. The complaint seeks pecuniary and non-pecuniary damages. The Company is in the initial stages of evaluating this matter and does not believe the impact of any such matter will be material to the Company's results of operation or financial position.

8. Income Taxes

Income before the provision for income taxes consists of the following (in thousands):

	Years Ended December 31,	
	2018	2019
Domestic	$ (12,527)	$ (17,142)
Foreign	(5,940)	(3,198)
Total income before provision for taxes	$ (18,467)	$ (20,340)

The components of income tax expense are as follows (in thousands):

	Years Ended December 31,	
	2018	2019
Current:		
Federal	$ —	$ —
State	2	10
Foreign	207	358
Total current expense	209	368
Deferred:		
Federal	(222)	7
State	4	27
Foreign	21	(39)
Total deferred expense	(197)	(5)
Total income tax expense	$ 12	$ 363

The reconciliation between the federal statutory rate and the Company's effective tax rate is summarized below:

	Years Ended December 31,	
	2018	2019
Federal statutory rate	21.0 %	21.0 %
State taxes, net of federal benefit	1.0 %	2.7 %
Foreign earnings at different rates	(8.0)%	(4.8)%
Tax credits	0.9 %	0.6 %
Permanent differences	(0.3)%	(0.4)%
Prior year true-up	(2.9)%	0.0 %
Change in valuation allowance	10.7 %	(20.9)%
Expiration of net operating loss carryforwards and credits	(22.5)%	0.0 %
Effective tax rate	(0.1)%	(1.8)%

Deferred income taxes arise from temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax reporting purposes, as well as operating losses and tax credit carryforwards. Significant components of the Company's deferred tax assets and liabilities for federal and state income taxes are as follows (in thousands):

	December 31,	
	2018	2019
Deferred tax assets:		
Net operating loss carryforwards	$ 19,519	$ 22,500
Tax credit carryforwards	4,659	4,896
Other	850	1,926
Gross deferred tax assets	25,028	29,322
Less: valuation allowance	(24,736)	(28,953)
Deferred tax assets	292	369
Deferred tax liabilities:		
Depreciation	(17)	(23)
Goodwill	(323)	(389)
Net deferred tax liabilities	$ (48)	$ (43)

The Company has established a full valuation allowance against its U.S. net deferred tax assets due to the uncertainty surrounding the realization of such assets. Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the U.S. net deferred tax assets have been fully offset by a valuation allowance of $29.0 million as of December 31, 2019. The valuation allowance decreased by $2.0 million and increased by $4.2 million for the years ended December 31, 2018 and 2019, respectively.

As of December 31, 2019, the Company had total net operating loss carryforwards for federal income tax purposes of approximately $96.0 million. If not utilized, these net federal operating loss carryforwards will expire beginning in 2020. The Company also had a state net operating loss carryforward of approximately $34.5 million which will expire beginning in 2028. The Company also had federal and state research and development ("R&D") tax credit carryforwards of approximately $2.6 million and $4.0 million, respectively. The federal tax R&D credit carryforwards will expire beginning in 2030 while the state tax R&D credit carryforwards have no expiration date.

Utilization of the net operating loss carryforwards and R&D tax credit carryforwards may be subject to annual limitations due to the ownership change limitations provided by the Internal Revenue Code, as defined in Section 382, and other similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. During the year ended December 31, 2018, the Company completed a formal 382 study for which the Company wrote off deferred tax assets for NOLs and credits of $3.1 million and $1.2 million, respectively. Since the Company had a full valuation allowance on these assets, there was no material impact to the tax provision.

Undistributed earnings of the Company's foreign subsidiaries amounted to a deficit balance at December 31, 2018. Foreign earnings, if any, are considered to be permanently reinvested and accordingly, no deferred U.S. income taxes have been provided thereon.

Annually, the Company determines whether it is "more likely than not" that a tax position will be sustained upon examination by the appropriate taxing authorities in considering whether any tax benefit can be recorded in the consolidated financial statements. As of December 31, 2019, the Company had unrecognized tax benefits of approximately $1.0 million, none of which will affect the tax rate if recognized. It is unlikely that the amount of liability for unrecognized tax benefits will significantly change over the next 12 months.

The following table summarizes the activity related to the Company's gross unrecognized tax benefits (in thousands):

Balance at December 31, 2017	$	1,070
Additions for tax positions related to current year		57
Reductions for tax positions related to prior year		(185)
Balance at December 31, 2018	$	942
Additions for tax positions related to current year		47
Additions for tax positions related to prior year		0
Balance at December 31, 2019	$	989

It is the Company's policy to include penalties and interest expense related to income taxes as a component of other expense and interest expense, respectively, as necessary.

The Company's major tax jurisdictions are the United States and California, Switzerland and Neuchâtel, and Grand Cayman. All of the Company's tax years will remain open for examination by the federal and state tax authorities for three and four years, respectively, from the date of utilization of the net operating loss or R&D Credits. The Company does not have any tax audits or other issues pending.

For the year ended December 31, 2018, the Company adopted a change in accounting policy in accordance with ASU 2016-09 to account for excess tax benefits and tax deficiencies as income tax expense or benefit, treated as discrete items in the reporting period in which they occur, and to recognize previously unrecognized deferred tax assets that arose directly from (or the use of which was postponed by) tax deductions related to equity compensation in excess of compensation recognized for financial reporting. The change was applied on a modified retrospective basis; no prior periods were restated as a result of this change in accounting policy.

In December 2017, the SEC issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provided a measurement period of up to one year from enactment date of the 2017 Tax Act for the Company to complete the accounting for the 2017 Tax Act and its related impacts. The income tax effects of the 2017 Tax Act for which the accounting was incomplete may include: the impact of the transition tax, the revaluation of deferred tax assets and liabilities to reflect the 21% corporate tax rate and the impact to the aforementioned items on state income taxes. During the year ended December 31, 2018, the Company completed its accounting for the 2017 Tax Act and did not recognize any material adjustments to the provisional amounts.

The 2017 Tax Act included the implementation of a modified territorial tax system, which has the effect of subjecting earnings of our foreign subsidiaries to U.S. taxation on Global Intangible Low-Taxed Income ("GILTI"). The FASB allows companies to adopt a policy election to account for the tax on GILTI under one of two methods: (i) account for the tax on GILTI as a component of tax expense in the period in which the tax is incurred (the period cost method), or (ii) account for the tax on GILTI in a company's measurement of deferred taxes (the deferred method). The Company has elected to account for the tax on GILTI under the period cost method.

9. Warrants for Convertible Preferred Stock

A summary of the outstanding convertible preferred stock warrants is as follows (in thousands, except per share and share amounts):

		December 31, 2018		December 31, 2019		
	Exercise Price Per share	Shares	Fair Value of Liability	Shares	Fair Value of Liability	Expiration Date
Series C-1 convertible preferred stock warrants	$ 1.057	2,152,939	$ 12	2,152,939	$ —	February 9, 2020

Series B-1 Convertible Preferred Stock Warrants

The Series B-1 convertible preferred stock warrants were issued in conjunction with a bank financing in 2008. The Series B-1 convertible preferred stock warrants expired August 24, 2018.

Series C-1 Convertible Preferred Stock Warrants

During February through October 2010, the Company issued an aggregate of 31,775,668 shares of Series C-1 convertible preferred stock in exchange for cash of $21.5 million and the conversion of outstanding convertible promissory notes and accrued interest on notes being converted. Additionally, 2,012,266 shares were issued in conjunction with the terms of a 2009 acquisition. In connection with the issuance of Series C-1 convertible preferred stock, the Company issued warrants to purchase 7,328,294 shares of Series C-1 convertible preferred stock at an exercise price of $1.057 per share. The Company recorded the fair value of the warrants of $1.9 million as convertible preferred stock warrant liability. The Company recorded a charge to interest and other expense of $0.2 million associated with the beneficial conversion feature.

During 2013, warrants to purchase 2,851,563 shares of Series C-1 convertible preferred stock were exercised at an exercise price of $1.057 per share, yielding $3.0 million. The Company revalued the warrants immediately prior to exercise and recorded income of $0.2 million in change in fair value of convertible preferred stock warrant liability in the consolidated statements of operations and comprehensive loss.

During 2015, warrants to purchase 92,005 shares of Series C-1 convertible preferred stock were exercised at an exercise price of $1.057 per share, yielding $0.1 million. The Company revalued the warrants immediately prior to exercise and recorded income of less than $0.1 million in change in fair value of convertible preferred stock warrant liability in the consolidated statements of operations and comprehensive loss.

In June 2015, the Board approved the extension of the maturity date from June 2015 to February 2017 for 323,465 warrants for Series C-1 convertible preferred stock.

In February 2017, the Board approved the extension of the maturity date from February 2017 to February 2018 for 4,384,726 warrants for Series C-1 convertible stock.

In February 2018, the Board amended the warrants to extend the expiration date to February 2020, provided that the share amount exercisable under the warrants decreases by 50% if exercised after February 8, 2018. As the warrants

are measured at fair value, the impact of the amendment on the fair value of the warrants was recorded in the statements of operations and comprehensive loss.

In February 2018, warrants to purchase 78,845 shares of Series C-1 convertible preferred stock were exercised at an exercise price of $1.057 per share, yielding $0.1 million. Pursuant to the February 2018 warrant amendment, shares issuable upon exercise of the warrants decreased from 4,305,881 to 2,152,939.

The Company revalued the remaining warrants at December 31, 2018 and December 31, 2019, and the Company recorded expense of less than $0.1 million and income of less than $0.1 million, respectively, in change in other income (expense), net in the consolidated statements of operations and comprehensive loss.

In February 2020, warrants to purchase 2,138,748 shares of Series C-1 convertible preferred stock were exercised at an exercise price of $1.057 per share, yielding $2.3 million cash proceeds and warrants to purchase 14,191 shares of Series C-1 convertible preferred stock warrants expired.

10. Convertible Preferred Stock

Under the Company's Amended and Restated Certificate of Incorporation, the Company is authorized to issue up to 177,985,811 shares of convertible preferred stock.

In April 2019, the Company issued 30,303,026 shares of Series G-1 convertible preferred stock at a price of $1.32 per share for cash proceeds of approximately $40.0 million. Additionally, the Company issued 19,039,350 shares of Series G-1 convertible preferred stock at a price of $1.32 per share upon the conversion of $25.1 million of convertible promissory notes and accrued interest with Boston Scientific Corporation (Note 6).

As of December 31, 2018, convertible preferred stock consists of the following (in thousands, except per share and share amounts):

Series	Number of Shares Authorized	Number of Shares Issued and Outstanding	Carrying Value[1]	Liquidation Preference per Share	Liquidation Value
Series A-1	8,486,224	8,486,224	$ 8,135	$ 0.959	$ 8,138
Series B-1	24,338,205	24,224,676	23,130	1.057	25,605
Series C-1	41,575,922	37,270,041	37,306	1.057	39,395
Series D-1	9,400,000	9,400,000	10,268	1.100	10,340
Series E-1	9,230,768	9,230,768	11,896	1.300	12,000
Series F-1	37,878,787	37,878,787	49,800	1.320	50,000
Total	130,909,906	126,490,496	$ 140,535		$ 145,478

(1) Carrying values above are net of issuance costs.

As of December 31, 2019, convertible preferred stock consists of the following (in thousands, except per share and share amounts):

Series	Number of Shares Authorized	Number of Shares Issued and Outstanding	Carrying Value[1]	Liquidation Preference per Share	Liquidation Value
Series A-1	8,486,224	8,486,224	$ 8,135	$ 0.959	$ 8,138
Series B-1	24,224,676	24,224,676	23,130	1.057	25,605
Series C-1	39,422,980	37,270,041	37,306	1.057	39,395
Series D-1	9,400,000	9,400,000	10,268	1.100	10,340
Series E-1	9,230,768	9,230,768	11,896	1.300	12,000
Series F-1	37,878,787	37,878,787	49,800	1.320	50,000
Series G-1	49,342,376	49,342,376	64,804	1.320	65,132
Total	177,985,811	175,832,872	$ 205,339		$ 210,610

(1) Carrying values above are net of issuance costs.

Dividends

The holders of Series A-1, Series B-1, Series C-1, Series D-1, Series E-1, Series F-1 and Series G-1 convertible preferred stock are entitled to receive dividends, out of any assets legally available, prior and in preference to any declaration or payment of any dividend on the common stock of the Company, at a rate of $0.07672, $0.08456, $0.08456, $0.08800, $0.10400, $0.1056 and $0.1056 respectively, per share per year (as adjusted for stock splits, stock dividends, reclassifications and similar events) payable quarterly when, and as declared by the Board of Directors and are not cumulative. After payment of such dividends, any additional dividends shall be distributed the holders of Series A-1, Series B-1, Series C-1, Series D-1, Series E-1, Series F-1 and Series G-1 convertible preferred stock and common stock on a pro rata basis. No dividends have been declared to date.

Liquidation

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of Series G-1 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of the assets of the Corporation or any such consideration to the holders of Series A-1, Series B-1, Series C-1, Series D-1, Series E-1 and Series F-1 convertible preferred stock or the holders of common stock, an amount equal to $1.32 per share (as adjusted for stock splits, stock dividends, reclassification and similar events) plus any declared but unpaid dividends. If upon the occurrence of such event, the assets and funds available are insufficient to permit the payment to the Series G-1 convertible preferred stockholders of the full preferential amounts, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of Series G-1 convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive. After the payment in full of the Series G-1 liquidation preference, the holders of Series F-1 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of the assets of the Corporation or any such consideration to the holders of Series A-1, Series B-1, Series C-1, Series D-1 and Series E-1 convertible preferred stock or the holders of common stock, an amount equal to $1.32 per share (as adjusted for stock splits, stock dividends, reclassification and similar events) plus any declared but unpaid dividends. If upon the occurrence of such event, the assets and funds available are insufficient to permit the payment to the Series F-1 convertible preferred stockholders of the full preferential amounts, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of Series F-1 convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive. After the payment in full of the Series F-1 liquidation preference, the holders of the Series E-1 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of the assets of the Corporation or any such consideration to the holders of Series A-1, Series B-1, Series C-1, and Series D-1 convertible preferred stock or the holders of common stock, an amount equal to $1.30 per share (as adjusted for stock splits, stock dividends, reclassification and

similar events) plus any declared but unpaid dividends. If upon the occurrence of such event, after payment in full of the Series F-1 liquidation preference, the assets and funds available are insufficient to permit the payment to the Series E-1 convertible preferred stockholders of the full preferential amounts, then the entire assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of Series E-1 convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive. After the payment in full of the Series F-1 liquidation preference and the Series E-1 liquidation preference, the holders of Series A-1, Series B-1, Series C-1 and Series D-1 convertible preferred stock are entitled to receive, prior and in preference to any distribution of the assets of the Corporation or any such consideration to the holders of common stock, an amount equal to $0.959, $1.057, $1.057 and $1.100 per share (as adjusted for stock splits, stock dividends, reclassification and similar events) plus any declared but unpaid dividends. If upon the occurrence of such liquidation, the assets and funds of the Company legally available for distribution are insufficient to permit payment to such holders, then the entire remaining assets and funds shall be distributed ratably among such holders in proportion to the preferential amounts each such holder is otherwise entitled to receive.

In the event of a Liquidation Transaction involving one or more third parties other than the purchaser of Series F-1 convertible preferred stock and after the payment in full of the liquidation preference required to be paid, the holders of the Series F-1 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company or any such consideration to the holders of common stock an amount equal to the Additional Preference (as defined below) for each share of Series F-1 preferred stock then held by them. Upon the closing of a Liquidation Transaction, if the amounts earned or payable to the stockholders of the Corporation on or before the one (1) year anniversary of the closing of such Liquidation Transaction is (i) equal to or greater than $250.0 million but less than $300.0 million, the Additional Preference is equal to $0.33 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 convertible preferred stock then held by them, (ii) equal to or greater than $300.0 million but less than $350.0 million, the Additional Preference is equal to $0.50 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 preferred stock then held by them, and (iii) equal to or greater than $350.0 million, the Additional Preference is equal to $0.66 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 convertible preferred stock then held by them.

After liquidation preferences to the convertible preferred stockholders have been paid, and after the Additional Preference has been paid, if any, the remaining assets of the Company shall be distributed to the holders of common stock, Series A-1, Series B-1, Series C-1, Series D-1, Series E-1, Series F-1 and Series G-1 convertible preferred stock as if the convertible preferred shares were converted into common stock at then-applicable conversion price until the Series A-1, Series B-1, Series C-1, Series D-1, Series E-1, Series F-1 and Series G-1 convertible preferred stock have received an aggregate amount (including the initial preference amount) equal to $2.877, $3.171, $3.171, $3.300, $3.900, $3.960 and $3.960 per share (as adjusted for stock splits, stock dividends, reclassifications and similar events) plus any declared and unpaid dividends. The holders of common stock are entitled to receive ratably on a per-share basis all remaining assets.

A liquidation, dissolution or winding up of the Company shall be deemed to be occasioned by, or include, (A) the sale, lease, license on an exclusive basis, conveyance or disposition (whether by merger or otherwise) by the Company of all or substantially all of the assets of the Company, or the sale or disposition of one or more subsidiaries of the Company if substantially all of the assets of the Company and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, or (B) the merger of the Company with or into any other corporation, limited liability company or other entity (other than a wholly-owned subsidiary of the Company); provided that none of the following shall be considered a Liquidation Transaction: (i) a merger effected exclusively for the purpose of changing the domicile of the Company, (ii) an equity financing effected for bona fide capital raising purposes in which the Company is the surviving entity or (iii) any transaction in which the stockholders of the Company immediately prior to the transaction own greater than 50% of the voting power of the Company or such other surviving or resulting entity (or if the Company or such other surviving or resulting entity is a wholly-owned subsidiary immediately following such acquisition, its parent).

Voting

The holders of convertible preferred stock shall have the same voting rights as the holders of common stock. The holders of common stock and the convertible preferred stock shall vote together as a single class on all matters. Each holder of common stock shall be entitled to one vote for each share of common stock held, and each holder of convertible preferred stock shall be entitled to the number of votes equal to the number of shares of common stock into which such shares of convertible preferred stock could be converted.

As of December 31, 2019, the Board of Directors was comprised of nine members. For so long as there are outstanding at least 500,000 shares of Series A-1 convertible preferred stock (as adjusted for stock splits, reclassifications or similar events), the holders of Series A-1 convertible preferred stock, voting as a separate class, shall be entitled to elect one member of the Company's Board of Directors. For so long as there are outstanding at least 500,000 shares of Series B-1 convertible preferred stock (as adjusted for stock splits, reclassifications or similar events), the holders of Series B-1 convertible preferred stock, voting as a separate class, shall also be entitled to elect two members of the Company's Board of Directors. For so long as there are outstanding at least 500,000 shares of Series C-1 convertible preferred stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series C-1 convertible preferred stock, voting as a separate class, shall be entitled to elect two members of the Company's Board of Directors. For so long as there are outstanding at least 500,000 shares of Series G-1 convertible preferred stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series G-1 convertible preferred stock, voting as a separate class, shall be entitled to elect one member of the Company's Board of Directors. The holders of common stock and convertible preferred stock, voting together as a single class on an as-if-converted basis, shall be entitled to elect all remaining members of the Board of Directors.

Conversion

Each share of convertible preferred stock shall be convertible, at the option of the holder at any time after the date of issuance into the number of fully paid and non-assessable shares of common stock as determined by dividing the original issue price per share of each series of convertible preferred stock by the conversion price per share in effect for the shares of each series of convertible preferred stock at the time of conversion. The original conversion price per share of Series A-1, Series B-1, Series C-1, Series D-1, Series E-1, Series F-1 and Series G-1 convertible preferred stock shall be the original issue price, subject to adjustment, as described in the Company's Amended and Restated Certificate of Incorporation.

Each share of convertible preferred stock shall automatically be converted into shares of common stock at the conversion rate at the time in effect for such share immediately upon the earlier of (i) the Company's sale of its common stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933 ("IPO") which results in aggregate cash proceeds to the Company of not less than $30.0 million (net of underwriting discounts and commissions) ("Qualified IPO") or (ii) the date specified by the vote or written consent of the holders of at least a majority of the then outstanding shares of convertible preferred stock, voting together as a single class. However, if the offering price to the public in a Qualified IPO ("Public Offering Price") is less than 1.15 times of the conversion price of the Series G-1 convertible preferred stock in effect immediately prior to the Qualified IPO, then the conversion price for the Series G-1 convertible preferred stock shall be adjusted such that, upon the closing of the Qualified IPO, each share of Series G-1 convertible preferred stock will convert into that number of shares of common stock equal to the sum of (a) the number of shares of common stock issuable upon conversion of such share of Series G-1 convertible preferred stock immediately prior to the Qualified IPO (the "Pre-IPO Shares") and (b) an additional number of shares of common stock determined by multiplying the Pre-IPO Shares by the quotient of (x) the difference between 1.15 times the conversion price of the Series G-1 convertible preferred stock immediately prior to the Qualified IPO and the Public Offering Price, divided by (y) the Public Offering Price.

11. Stockholders' Deficit

Common Stock

As of December 31, 2018 and December 31, 2019, the Company's certificate of incorporation authorized the Company to issue up to 180,000,000 and 240,000,000 shares of common stock, respectively. Common stockholders are entitled to dividends as and when declared by the Board of Directors, subject to the rights of holders of all classes of stock outstanding having priority rights as to dividends. There have been no dividends declared to date. The holder of each share of common stock is entitled to one vote. The Company constructively retired 4,155 shares of common stock during the year that were abandoned.

Shares Reserved for Future Issuance

The Company has reserved shares of common stock for future issuances as follows:

	December 31,	
	2018	2019
Series A-1 convertible preferred stock outstanding	8,486,224	8,486,224
Series B-1 convertible preferred stock outstanding	24,224,676	24,224,676
Series C-1 convertible preferred stock outstanding	37,270,041	37,270,041
Series D-1 convertible preferred stock outstanding	9,400,000	9,400,000
Series E-1 convertible preferred stock outstanding	9,230,768	9,230,768
Series F-1 convertible preferred stock outstanding	37,878,787	37,878,787
Series G-1 convertible preferred stock outstanding	—	49,342,376
Warrants to purchase Series C-1 convertible preferred stock	2,152,939	2,152,939
Convertible note*	—	—
Common stock options issued and outstanding	26,265,227	32,793,421
Common stock available for future grants	3,826,728	776,032

* At December 31, 2018, the conversion of the convertible notes into convertible preferred stock was dependent on the outstanding loan balance including accrued interest and the conversion stock per share price at the date of Qualified Equity Financing, Change of Control, Liquidation, or Prepayment Conversion (see Note 6). These factors were not estimable and the number of convertible preferred stock was not determinable. These convertible notes converted to Series G-1 convertible preferred stock in April 2019 (Note 10).

Stock Option Plan

As of December 31, 2019, the Company reserved 52,887,732 shares of its common stock under its 2000 Stock Plan (the "2000 Stock Plan") and 2010 Stock Plan (the "2010 Stock Plan" and, together with the 2000 Stock Plan, the "Stock Plans"). Options granted under the Stock Plans may be either incentive stock options or nonqualified stock options. Incentive stock options ("ISO") may be granted only to the Company employees (including officers and directors). Nonqualified stock options ("NSO") may be granted to the Company employees and consultants. As of December 31, 2018 and December 31, 2019, no shares of common stock remain available for issuance to officers, directors, employees and consultants pursuant to the 2000 Stock Plan.

Options to purchase the Company's common stock may be granted at a price not less than 100% of the fair market value in the case of ISO or NSO, except for an employee or non-employee with options who owns more than 10% of the voting power of all classes of stock of the Company in which case the exercise price shall be no less than 110% of the fair market value per share on the grant date. Fair market value is determined by the Board of Directors. Options are immediately exercisable and vest as determined by the Board of Directors ranging from immediately upon grant to a rate of 25% per annum over four years from the grant date. Options expire as determined by the Board of Directors but not more than ten years after the date of grant.

Activity under the Stock Plans is set forth below:

		Outstanding Options	
	Shares Available for Grant	Number of Shares	Weighted Average Exercise Price
Balance, January 1, 2018	1,251,912	24,199,788	$ 0.15
Additional shares reserved	5,021,795	—	—
Options granted	(2,559,000)	2,559,000	0.14
Options exercised	—	(181,540)	0.17
Options canceled[1]	112,021	(312,021)	0.16
Balance, December 31, 2018	3,826,728	26,265,227	$ 0.15
Additional shares reserved	7,385,728	—	—
Options granted	(10,789,595)	10,789,595	$ 0.19
Options exercised	—	(3,903,230)	0.14
Options canceled[1]	353,171	(358,171)	0.14
Balance, December 31, 2019	776,032	32,793,421	$ 0.17

(1) Canceled stock options issued under the Company's 2000 Stock Plan were canceled after the 2010 Stock Plan was approved and are not included in the shares available for grant as they were not returned to the stock option pool.

The aggregate intrinsic value of options exercised during the years ended December 31, 2018 and December 31, 2019 was less than $0.1 million and $0.2 million, respectively.

The options outstanding, exercisable and vested by exercise price at December 31, 2019 were as follows:

Options Outstanding and Exercisable			Options Exercisable and Vested	
Exercise Price	Number Outstanding	Weighted Average Remaining Contractual Life (in Years)	Number Exercisable and Vested	Weighted Average Exercise Price
$ 0.13	3,065,819	7.61	2,390,766	$ 0.13
$ 0.14	12,576,498	6.24	9,177,183	$ 0.14
$ 0.15	7,674,949	6.05	7,619,831	$ 0.15
$ 0.20	565,000	0.68	565,000	$ 0.20
$ 0.20	409,078	2.59	409,078	$ 0.20
$ 0.21	6,707,500	9.80	280,068	$ 0.21
$ 0.24	399,083	3.67	399,083	$ 0.24
$ 0.29	1,197,494	4.67	1,197,494	$ 0.29
$ 0.50	198,000	9.89	—	$ 0.50
	32,793,421	6.85	22,038,503	

The weighted average exercise price and aggregate intrinsic value of options outstanding and exercisable at December 31, 2018 was $0.15 per share and $0.2 million, respectively. The weighted average exercise price and aggregate intrinsic value of options outstanding and exercisable at December 31, 2019 was $0.17 per share and $10.9 million, respectively. The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying stock options and the fair value of the Company's common stock for stock options that were in-the-money as of December 31, 2018 and December 31, 2019.

	December 31, 2019		
	Number of Shares	Weighted Average Exercise Price	Weighted Average Contractual Life (in Years)
Options vested	22,038,503	$ 0.16	5.69
Options vested and expected to vest	32,793,421	$ 0.17	6.85

Total intrinsic value of options vested and expected to vest as of December 31, 2018 and December 31, 2019 was $0.2 million and $10.9 million, respectively.

Early Exercise of Stock Options

Under the terms of the individual option grants, all options are fully exercisable on the grant date, subject to the Company's repurchase right at the original exercise price. Accordingly, options may be exercised prior to vesting. The shares are subject to the Company's lapsing repurchase right upon termination of employment or over the options' vesting period of generally four years at the original purchase price. The proceeds initially are recorded in other liabilities from the early exercise of stock options and are reclassified to additional paid-in capital as the Company's repurchase right lapses. During the year ended December 31, 2018, the Company did not repurchase shares of common stock. During the year ended December 31, 2019, the Company repurchased 91,459 shares of common stock for less than $0.1 million. As of December 31, 2018 and December 31, 2019, 268,604 and 1,998,188 shares were subject to repurchase, with an aggregate exercise price of less than $0.1 million and $0.3 million, respectively, and were recorded in other current liabilities.

Stock-Based Compensation for Employees

During the years ended December 31, 2018 and December 31, 2019, the Company granted stock options to employees to purchase 2,559,000 and 10,589,595 shares of common stock, respectively. The weighted average grant-date fair value of the employee stock options granted during the years ended December 31, 2018 and December 31, 2019 was $0.14 and $0.18 per share, respectively.

The Company uses the Black-Scholes Merton option-pricing model to determine the fair value of stock options. The determination of the fair value of stock-based payment awards on the date of grant is affected by the stock price as well as assumptions regarding a number of complex and subjective variables. These variables include expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rates and expected dividends. The estimated grant date fair values of employee stock options were calculated using the following assumptions:

	Years Ended December 31,	
	2018	2019
Weighted average expected term (in years)	6.3	5.3 - 6.1
Volatility	46.0%	47.1% - 49.7%
Risk-free interest rate	2.4%-2.9%	1.4% - 1.8%
Dividend yield	—	—

Expected Term

The expected term is calculated using the simplified method, which is available where there is insufficient historical data about exercise patterns and post-vesting employment termination behavior. The simplified method is based on the vesting period and the contractual term for each grant, or for each vesting-tranche for awards with graded vesting. The mid-point between the vesting date and the maximum contractual expiration date is used as the expected term under this method. For awards with multiple vesting-tranches, the periods from grant until the mid-point for each of the tranches are averaged to provide an overall expected term.

Volatility

The expected stock price volatility assumptions for the Company's stock options for the years ended December 31, 2018 and December 31, 2019 was determined by examining the historical volatilities for industry peers, referred to as "guideline" companies, as the Company did not have any trading history for the Company's common stock. In evaluating similarity, the Company considered factors such as industry, stage of life cycle and size.

Risk-Free Rate

The risk-free interest rate assumption is based on the U.S. Treasury instruments whose term was consistent with the expected term of the Company's stock options.

Dividend Yield

The expected dividend assumption is based on the Company's history and expectation of dividend payouts.

Fair Value of Common Stock

The fair value of the Company's common stock is determined by the board of directors with assistance from management and, in part, on input from an independent third-party valuation firm. The board of directors determines the fair value of common stock by considering a number of objective and subjective factors, including valuations of comparable companies, sales of convertible preferred stock, operating and financial performance, the lack of liquidity of the Company's common stock and the general and industry-specific economic outlook.

Stock-Based Compensation for Non-Employees

Stock-based compensation expense related to stock options granted to non-employees is recognized as the stock options are earned. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services received. The fair value of the stock options granted to non-employees is calculated at each reporting date using the Black-Scholes Merton option-pricing model. Effective January 1, 2019, the Company accounts for shared-based awards granted to non-employees based on the fair value calculated using the Black-Scholes Merton option-pricing model on the date of grant. During the year ended December 31, 2018, the Company did not grant stock options to non-employees. During the year ended December 31, 2019, the Company granted 200,000 shares of stock options to non-employees. The weighted average grant-date fair value of the non-employee stock options granted during the year ended December 31, 2019 was $0.07 per share.

The estimated grant date fair values of non-employee stock options granted during the year ended December 31, 2019 was calculated using the following assumptions:

Weighted average expected term (in years)	5.0 - 5.3
Volatility	47.1% - 47.3%
Risk-free interest rate	1.8%
Dividend yield	—

Stock-based compensation expense on options granted to non-employees for the years ended December 31, 2018 and December 31, 2019 was less than $0.1 million.

Total Stock-Based Compensation

Stock-based compensation expense is reflected in the statements of operations and comprehensive loss as follows (in thousands):

	Years Ended December 31,	
	2018	2019
Cost of goods sold	$ 18	$ 30
Research and development	62	64
Selling, general and administrative	286	270
Total	$ 366	$ 364

As of December 31, 2019, there was $1.9 million of unrecognized compensation costs related to non-vested common stock options, expected to be recognized over a weighted-average period of 2.29 years, respectively. The total grant date fair value of shares vested during the years ended December 31, 2018 and December 31, 2019 was $0.4 million and $0.3 million, respectively.

12. Net Loss per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders which excludes shares which are legally outstanding, but subject to repurchase by the Company (in thousands, except share and per share amounts):

	Years Ended December 31,	
	2018	2019
Numerator		
Net loss attributable to common stockholders	$ (18,479)	$ (20,703)
Denominator		
Weighted-average common stock outstanding	17,067,346	17,963,168
Less: weighted-average common shares subject to repurchase	(318,801)	(201,310)
Weighted-average common shares used to compute basic and diluted net loss per share	16,748,545	17,761,858
Net loss per share attributable to common stockholders, basic and diluted	$ (1.10)	$ (1.17)

The following potentially dilutive securities outstanding have been excluded from the computation of diluted weighted average shares outstanding because such securities have an antidilutive impact due to the Company's net loss, in common stock equivalent shares:

	Years Ended December 31,	
	2018	2019
Convertible preferred stock	126,490,496	175,832,872
Convertible preferred stock warrants	2,152,939	2,152,939
Options to purchase common stock	26,265,227	32,793,421
Unvested early exercised common stock options	268,604	1,998,188
Conversion of convertible notes*	—	—

* At December 31, 2018, the conversion of the convertible notes into convertible preferred stock was dependent on the outstanding loan balance including accrued interest and the conversion stock per share price at the date of Qualified Equity Financing, Change of Control, Liquidation, or Prepayment Conversion (see Note 6). These factors were not estimable and the number of convertible preferred stock was not determinable. These convertible notes converted to Series G-1 convertible preferred in April 2019 (Note 10).

Unaudited Pro Forma Net Loss per Share Attributable to Common Stockholders

Unaudited pro forma basic and diluted net loss per share attributable to common stockholders are computed as follows (in thousands, except share and per share data):

	Year ended December 31, 2019 (unaudited)
Numerator	
Net loss attributable to common stockholders, basic and diluted	$ (20,703)
Adjust: Change in fair value of convertible preferred stock warrant liability	(12)
Pro forma net loss attributable to common stockholders, basic and diluted	$ (20,715)
Denominator	
Weighted-average common shares outstanding, basic and diluted	17,761,858
Adjust: Conversion of convertible preferred stock	161,024,681
Adjust: Conversion of convertible preferred stock warrants	2,138,748
Weighted-average shares used in computing pro forma net loss per share, basic and diluted	180,925,287
Pro forma net loss per share attributable to common stockholders, basic and diluted	$ (0.11)

13. Segment Information

The chief operating decision maker for the Company is the Chief Executive Officer. The Company's Chief Executive Officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by geographic region, for purposes of allocating resources and evaluating financial performance. The Company has one business activity and there are no segment managers who are held accountable for operations, operating results or plans for levels or components below the consolidated unit level. Accordingly, the Company has determined that it has a single reportable and operating segment structure. The Company's Chief Executive Officer evaluates performance based primarily on revenue in the geographic locations in which the Company operates.

Revenue by geographic area is based on the billing address of the customer. The following table sets forth our revenue by geographic area (in thousands):

	Years Ended December 31,	
	2018	2019
Europe, Middle-East and Africa ("EMEA")	$ 16,175	$ 18,364
Asia Pacific	3,115	3,227
Other International	151	300
United States	563	10,704
Total	$ 20,004	$ 32,595

Long-lived assets by geographic area are based on physical location of those assets. The following table sets forth our long-lived assets by geographic area (in thousands):

	December 31,	
	2018	2019
United States	$ 322	$ 852
EMEA	37	40
Asia Pacific	16	10
Total	$ 375	$ 902

14. Employee Benefit Plan

Effective October 1997, the Company implemented a retirement savings plan (the "Savings Plan") which is intended to qualify as a deferred savings plan under Section 401(k) of the Internal Revenue Code. Participants are allowed to contribute up to 100% of the total compensation, not to exceed the amount allowed by the applicable statutory prescribed limit. There have been no contributions made to the Savings Plan by the Company since inception.

15. Related Parties

Since October 2013, the Company has received services from the chairman of a subsidiary of the Company. During 2014, this person served as Interim CEO and was appointed to the Board of Directors of the Company. Amounts paid related to consulting services for the years ended December 31, 2018 and December 31, 2019 was $0.1 million and $0.1 million, respectively.

See Note 6 for details regarding the Company's Second Lien Loan and Security Agreement with Boston Scientific Corporation.

16. Subsequent Events

On February 20, 2020, the Company executed a Loan and Security Agreement (the CIBC Agreement) with Canadian Imperial Bank of Commerce (CIBC) to raise up to $32.0 million in debt financing consisting of $17.0 million advanced at the closing of the agreement (Tranche A), with the option to drawing up to an additional $8.0 million (Tranche B) on or before February 20, 2022. The term loan provides for an additional financing tranche (Tranche C) of up to $7.0 million on or prior to February 20, 2022, which is conditioned upon achieving a trailing six-month revenue of at least $20.0 million as of the date of any Tranche C borrowing. The availability of Tranche B and Tranche C is further conditioned upon the joining of PulmonX International Sàrl to the CIBC Agreement and the execution by PulmonX International Sàrl of Swiss-law collateral documentation in favor of CIBC.

The loan will mature in 60 months. Equal monthly principal payments will begin after a 24-month interest only grace period. The interest only grace period can extended to 36 months if we achieve three-month trailing revenue of at least $20 million as of February 20, 2022.

The loan bears interest at a floating rate equal to 1.0% above the Wall Street Journal Prime Rate at any time. The loan is collateralized by substantially all of the Company's assets, including cash and cash equivalents, accounts receivable, intellectual property and equipment. The Company may prepay the loan, subject to certain requirements. The CIBC Agreement includes customary restrictive covenants, financial covenants, events of default and other customary terms and conditions.

In February 2020, the Company repaid its entire obligation under the term loan agreement with Oxford Finance LLC amounting to $17.3 million, including outstanding loan amount of $15.0 million, final payment of $1.3 million, amendment fees of $0.9 million and accrued interest of $0.1 million.

In January 2020, the Company terminated the Second Lien Loan and Security Agreement with Boston Scientific Corporation (Note 6).

In January and February 2020, warrants to purchase 2,138,748 shares of Series C-1 convertible preferred stock were cash exercised at an exercise price of $1.057 per share, yielding $2.3 million cash proceeds and warrants to purchase 14,191 shares of Series C-1 convertible preferred stock warrants expired.

Management has evaluated all transactions and events through February 21, 2020, the date which these consolidated financial statements were available to be issued.

Through and including , 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in the Common Stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

Shares

Pulmonx Corporation

Common Stock

PROSPECTUS

BofA Securities

Morgan Stanley

Stifel

Wells Fargo Securities

Canaccord Genuity

, 2020

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all costs and expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, payable by us in connection with the sale of the common stock being registered. All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee and the exchange listing fee.

		Amount to be Paid
SEC Registration Fee	$	11,196*
FINRA filing fee		13,438*
Exchange listing fee		25,000*
Printing and engraving		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer agent and registrar fees		4,000*
Miscellaneous fees and expenses		*
Total	$	*

* To be completed by amendment.

Item 14. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct, or knowingly violated a law, authorized the payment of a dividend, or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit, or proceeding to which such person is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, our amended and restated certificate of incorporation and amended and restated bylaws in effect upon the closing of this offering provide that: (1) we are required to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law; (2) we may, in our discretion, indemnify our officers, employees, and agents as set forth in the Delaware General Corporation Law; (3) we are required, upon satisfaction of certain conditions, to advance all expenses incurred by our directors in

connection with certain legal proceedings; (4) the rights conferred in the bylaws are not exclusive; and (5) we are authorized to enter into indemnification agreements with our directors, officers, employees, and agents.

Our policy is to enter into agreements with our directors that require us to indemnify them against expenses, judgments, fines, settlements, and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. These indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. At present, no litigation or proceeding is pending that involves any of our directors regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters, under certain conditions, of us and our officers and directors for certain liabilities arising under the Securities Act. Our amended and restated investors rights agreement with certain stockholders also provides for cross-indemnification in connection with the registration of our common stock on behalf of such investors.

Item 15. Recent Sales of Unregistered Securities.

The following list sets forth information regarding all unregistered securities issued by us since January 1, 2017 through the date of the prospectus that is a part of this registration statement. Also included is the consideration received by us for such shares and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

Issuances of Common Stock and Options to Purchase Common Stock

From January 1, 2017 through December 31, 2019, we granted under our 2010 Stock Plan options to purchase an aggregate of 16,315,101 shares of our common stock to employees, consultants, and directors, having exercise prices ranging from $0.13 to $0.50 per share. Of these, options to purchase an aggregate of 388,972 shares have been cancelled without being exercised. From January 1, 2017 through December 31, 2019, an aggregate of 1,229,000 shares of our common stock were issued upon the exercise of stock options under the 2000 Stock Plan, at exercise prices between $0.06 and $0.15 per share, for aggregate proceeds of approximately $0.1 million and an aggregate of 4,168,098 shares of our common stock were issued upon the exercise of stock options under the 2010 Stock Plan, at exercise prices between $0.13 and $0.24 per share, for aggregate proceeds of approximately $0.6 million.

The offers, sales, and issuances of the securities described in the preceding paragraph were deemed to be exempt from registration either under Rule 701 promulgated under the Securities Act (Rule 701) in that the transactions were under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act in that the transactions were between an issuer and members of its senior executive management and did not involve any public offering within the meaning of Section 4(a)(2). The recipients of such securities were our employees, directors, or consultants and received the securities under our equity incentive plans. Appropriate legends were affixed to the securities issued in these transactions.

Issuances of Preferred Stock and Warrants

These securities were issued pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, in reliance on the recipient's status as an "accredited investor" as defined in Rule 501(a) of Regulation D.

In January 2017, we issued and sold an aggregate of 7,575,757 shares of Series F-1 Preferred Stock to one accredited investor at $1.32 per share for an aggregate consideration of approximately $9,999,999.24.

In April 2019, we issued and sold an aggregate of 49,342,376 shares of Series G-1 Preferred Stock to 18 accredited investors at $1.32 per share for an aggregate consideration of approximately $65,131,936.32.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions or any public offering.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

The following documents are filed as exhibits to this registration statement.

Exhibit Number	Description of Document
1.1†	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation of Pulmonx Corporation, as currently in effect.
3.2†	Form of Amended and Restated Certificate of Incorporation of Pulmonx Corporation, to be effective upon the closing of this offering.
3.3	Amended and Restated Bylaws of Pulmonx Corporation, as currently in effect.
3.4†	Form of Amended and Restated Bylaws of Pulmonx Corporation, to be effective upon the closing of this offering.
4.1†	Form of common stock certificate of Pulmonx Corporation.
4.2	Amended and Restated Investors' Rights Agreement by and among Pulmonx Corporation and certain of its stockholders, dated April 16, 2019.
5.1†	Opinion of Cooley LLP.
10.1+	2010 Stock Plan, as amended to date.
10.2+	Forms of Notice of Stock Option Grant, Option Agreement, and Exercise Notice under 2010 Stock Plan.
10.3+†	2020 Equity Incentive Plan, as amended to date.
10.4+†	Forms of Option Agreement, Notice of Stock Option Grant, and Exercise Notices under 2020 Equity Incentive Plan.
10.5+†	Form of Restricted Stock Unit Award Agreement under 2020 Equity Incentive Plan.
10.6+†	2020 Employee Stock Purchase Plan.
10.7†	Form of Indemnification Agreement by and between Pulmonx Corporation and each of its directors and executive officers.

10.8+	Executive Employment Agreement, by and between Pulmonx Corporation and Glendon E. French, dated December 10, 2014.
10.9+	Offer Letter Agreement, by and between Pulmonx Corporation and Geoffrey Beran Rose, dated December 11, 2014.
10.10+	Offer Letter Agreement, by and between Pulmonx Corporation and Derrick Sung, Ph.D., dated March 12, 2019.
10.11+	Consulting Agreement, by and between PulmonX International Sàrl and Orsco Life Sciences AG, dated October 1, 2013.
10.12+	Amendment to Consulting Agreement, by and between PulmonX International Sàrl and Orsco Life Sciences AG, dated March 1, 2014.
10.13+	Second Amendment to Consulting Agreement, by and between PulmonX International Sàrl and Orsco Life Sciences AG, dated July 14, 2014.
10.14+	Third Amendment to Consulting Agreement, by and between PulmonX International Sàrl and Orsco Life Sciences AG, dated April 27, 2015.
10.15+	Appointment Letter, by and between PulmonX International Sàrl and Oern R. Stuge, dated December 18, 2013.
10.16	Office Lease, by and between Pulmonx Corporation and HCP LS Redwood City, LLC, dated September 4, 2009.
10.17	First Amendment to Office Lease, by and between Pulmonx Corporation and HCP LS Redwood City, LLC, dated October 3, 2014.
10.18	Second Amendment to Office Lease, by and between Pulmonx Corporation and HCP LS Redwood City, LLC, dated November 7, 2019.
10.19	Loan and Security Agreement, by and between Pulmonx Corporation and Canadian Imperial Bank of Commerce, dated February 20, 2020.
10.20	Intellectual Property Security Agreement, by and between Pulmonx Corporation and Canadian Imperial Bank of Commerce, dated February 20, 2020.
21.1	List of Subsidiaries of Registrant.
23.1†	Consent of Cooley LLP (included in Exhibit 5.1).
23.2	Consent of BDO USA, LLP, independent registered public accounting firm.
24.1	Power of Attorney (included on signature page hereto).

+ Indicates management contract or compensatory plan.
† To be filed by amendment.

(b) Financial Statement Schedules

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Redwood City, State of California, on the 28th day of February, 2020.

PULMONX CORPORATION

By: /s/Glendon E. French
Glendon E. French
President, Chief Executive Officer and Director

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Glendon E. French and Derrick Sung, and each of them, his or her true and lawful agent, proxy, and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to (1) act on, sign, and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign, and file such certificates, instruments, agreements, and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy, and attorney-in-fact or any of his or her substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/Glendon E. French Glendon E. French	President, Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2020
/s/Derrick Sung, Ph.D. Derrick Sung, Ph.D.	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 28, 2020
/s/Charles Chon Charles Chon	Director	February 28, 2020
/s/Richard Ferrari Richard Ferrari	Director	February 28, 2020
/s/Daniel Florin Daniel Florin	Director	February 28, 2020
/s/Staffan Lindstrand Staffan Lindstrand	Director	February 28, 2020
/s/Michael Matly, M.D. Michael Matly, M.D.	Director	February 28, 2020
/s/Dana G. Mead, Jr. Dana G. Mead, Jr.	Director	February 28, 2020
/s/Rodney Perkins, M.D. Rodney Perkins, M.D.	Director	February 28, 2020
/s/Stephen Salmon Stephen Salmon	Director	February 28, 2020
/s/Oern Stuge, M.D. Oern Stuge, M.D.	Director	February 28, 2020

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF PULMONX CORPORATION

The undersigned, Glendon E. French, hereby certifies that:

1. He is the duly elected and acting President of Pulmonx Corporation, a Delaware corporation.

2. The Certificate of Incorporation of this corporation was originally filed with the Secretary of State of Delaware on December 4, 2013 under the name of Pulmonx Corporation.

3. The Certificate of Incorporation of this corporation shall be amended and restated to read in full as follows:

ARTICLE I

The name of this corporation is Pulmonx Corporation (the "Corporation").

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is: Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is: The Corporation Trust Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE IV

(A) **Classes of Stock**. The Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the Corporation is authorized to issue is Four Hundred Seventeen Million Nine Hundred Eighty-Five Thousand Eight Hundred Eleven (417,985,811) shares, each with a par value of $0.001 per share. Two Hundred Forty Million (240,000,000) shares shall be Common Stock and One Hundred Seven-Seven Million Nine Hundred Eighty-Five Thousand Eight Hundred Eleven (177,985,811) shares shall be Preferred Stock.

(B) **Increase in Authorized Common Stock**. Notwithstanding the provisions of Section 242(b)(2) of the Delaware General Corporation Law, as amended, the authorized number of shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding and the number of shares of Common Stock reserved for issuance upon the exercise or conversion of convertible or exchangeable securities then

outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation (voting together on an as-if converted basis).

(C) **Rights, Preferences and Restrictions of Preferred Stock**. The Preferred Stock authorized by this Amended and Restated Certificate of Incorporation (the "Restated Certificate") may be issued from time to time in one or more series. The first series of Preferred Stock shall be designated "Series A-1 Preferred Stock" and shall consist of Eight Million Four Hundred Eighty-Six Thousand Two Hundred Twenty-Four (8,486,224) shares. The second series of Preferred Stock shall be designated "Series B-1 Preferred Stock" and shall consist of Twenty-Four Million Two Hundred Twenty-Four Thousand Six Hundred Seventy Six (24,224,676) shares. The third series of Preferred Stock shall be designated "Series C-1 Preferred Stock" and shall consist of Thirty-Nine Million Four Hundred Twenty-Two Thousand Nine Hundred Eighty (39,422,980) shares. The fourth series of Preferred Stock shall be designated "Series D-1 Preferred Stock" and shall consist of Nine Million Four Hundred Thousand (9,400,000) shares. The fifth series of Preferred Stock shall be designated "Series E-1 Preferred Stock" and shall consist of Nine Million Two Hundred Thirty Thousand Seven Hundred Sixty-Eight (9,230,768) shares. The sixth series of Preferred Stock shall be designated "Series F-1 Preferred Stock" and shall consist of Thirty-Seven Million Eight Hundred Seventy-Eight Thousand Seven Hundred Eighty-Seven (37,878,787) shares. The seventh series of Preferred Stock shall be designated "Series G-1 Preferred Stock" and shall consist of Forty-Nine Million Three Hundred Forty-Two Thousand Three Hundred Seventy-Six (49,342,376) shares. The rights, preferences, privileges, and restrictions granted to and imposed on the Preferred Stock are as set forth below in this Section C of Article IV.

1. **Dividend Provisions**. The holders of shares of Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities and rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock of the Corporation) on the Common Stock of the Corporation, at the rate of (i) $0.07672 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series A-1 Preferred Stock; (ii) $0.08456 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series B-1 Preferred Stock; (iii) $0.08456 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series C-1 Preferred Stock; (iv) $0.088 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series D-1 Preferred Stock; (v) $0.104 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series E-1 Preferred Stock, (vi) $0.1056 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series F-1 Preferred Stock and (vii) $0.1056 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series G-1 Preferred Stock, payable quarterly when, as and if declared by the Board of Directors. Such dividends shall not be cumulative. After payment of such dividends, any additional dividends shall be distributed among the holders of Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred

Stock, Series E-1 Preferred Stock, Series F-1 Preferred Stock, Series G-1 Preferred Stock and Common Stock pro rata based on the number of shares of Common Stock then held by each holder (assuming conversion of all such Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred Stock, Series E-1 Preferred Stock, Series F-1 Preferred Stock and Series G-1 Preferred Stock into Common Stock). No dividends may be paid on any other class or series of the Corporation's equity securities until all declared and unpaid dividends on the Preferred Stock have been paid in full.

2. **Liquidation**.

(a) In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, distributions shall be made in the following manner, subject to the terms of the Corporation's Amended and Restated 2015 Management Incentive Plan (the "MIP"):

(i) **Series G-1 Liquidation Preference**. The holders of Series G-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation or any such consideration to the holders of Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock and Series D-1 Preferred Stock (together, the "Junior Preferred Stock"), the holders of Series E-1 Preferred Stock, the holders of Series F-1 Preferred Stock or the holders of Common Stock by reason of their ownership thereof, an amount per share equal to $1.32 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series G-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series G-1 Preferred Stock (the "Series G-1 Liquidation Preference"). If, upon the occurrence of such liquidation, dissolution or winding up of the Corporation, the assets and funds thus distributed among the holders of the Series G-1 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts pursuant to this Section 2(a)(i), then the entire assets and funds of the Corporation legally available for distribution shall be distributed with equal priority and ratably among the holders of the Series G-1 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive pursuant to this Section 2(a)(i).

(ii) **Series F-1 Liquidation Preference**. After the payment in full of the Series G-1 Liquidation Preference as set forth in Section 2(a)(i) above, the holders of Series F-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation or any such consideration to the holders of Junior Preferred Stock, the holders of Series E-1 Preferred Stock or the holders of Common Stock by reason of their ownership thereof, an amount per share equal to $1.32 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series F-1 Preferred Stock (the "Series F-1 Liquidation Preference"). If, upon the occurrence of such liquidation, dissolution or winding up of the Corporation, after payment in full of the Series G-1 Liquidation Preference pursuant to Section 2(a)(i), the assets and funds thus distributed among the holders of the Series F-1 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts pursuant to this Section 2(a)(ii), then the entire assets and funds of

the Corporation legally available for distribution shall be distributed with equal priority and ratably among the holders of the Series F-1 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive pursuant to this Section 2(a)(ii).

(iii) **Series E-1 Liquidation Preference**. After the payment in full of the Series G-1 Liquidation Preference and Series F-1 Liquidation Preference as set forth in Sections 2(a)(i) and (ii) above, respectively, the holders of Series E-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation or any such consideration to the holders of Junior Preferred Stock or the holders of Common Stock by reason of their ownership thereof, an amount per share equal to $1.30 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series E-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series E-1 Preferred Stock (the "Series E-1 Liquidation Preference"). If, upon the occurrence of such liquidation, dissolution or winding up of the Corporation, after payment in full of the Series G-1 Liquidation Preference and Series F-1 Liquidation Preference pursuant to Sections 2(a)(i) and (ii), respectively, the assets and funds thus distributed among the holders of the Series E-1 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts pursuant to this Section 2(a)(iii), then the entire assets and funds of the Corporation legally available for distribution shall be distributed with equal priority and ratably among the holders of the Series E-1 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive pursuant to this Section 2(a)(iii).

(iv) **Junior Preferred Liquidation Preference**. After the payment in full of the Series G-1 Liquidation Preference, Series F-1 Liquidation Preference and the Series E-1 Liquidation Preference as set forth in Sections 2(a)(i), (ii) and (iii) above, respectively, the holders of the Junior Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation or any such consideration to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to (i) $0.959 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) for each share of Series A-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series A-1 Preferred Stock; (ii) $1.057 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series B-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series B-1 Preferred Stock; (iii) $1.057 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series C-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series C-1 Preferred Stock and (iv) $1.10 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series D-1 Preferred Stock then held by them, plus declared but unpaid dividends on the Series D-1 Preferred Stock. If, upon the occurrence of such liquidation, dissolution or winding up of the Corporation, after payment in full of the Series G-1 Liquidation Preference, Series F-1 Liquidation Preference and Series E-1 Liquidation Preference pursuant to Sections 2(a)(i), (ii) and (iii), respectively, the assets and funds thus distributed among the holders of the Junior Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts pursuant to this Section 2(a)(iv), then the entire remaining assets and funds of the Corporation legally available for distribution shall be distributed with equal priority and ratably among the holders of the Junior

Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive pursuant to this Section 2(a)(iv).

(v) **Additional Series F-1 Preferred Stock Preference**. In the event of a Liquidation Transaction involving one or more third parties other than the purchaser of Series F-1 Preferred Stock or its affiliates pursuant to that certain Series F-1 Preferred Stock Purchase Agreement by and between the Corporation and such purchaser, dated June 8, 2015, as the same may be amended and/or restated, and after the payment in full of the amounts required to be paid by Sections 2(a)(i), (ii), (iii) and (iv), the holders of the Series F-1 Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation or any such consideration to the holders of Common Stock by reason of their ownership thereof, an amount equal to the Additional Preference (as defined below) for each share of Series F-1 Preferred Stock then held by them; provided, that if the portion of the consideration payable to the stockholders of the Corporation upon the closing of such Liquidation Transaction (including any amounts placed in escrow or subject to holdback to satisfy indemnification obligations of the Corporation and/or its stockholders and any amounts that are to be paid subject only to the passage of time or to similar non-performance based contingencies or otherwise guaranteed to be paid) (collectively, the "Initial Payment") is less than $250,000,000, the holders of Series F-1 Preferred Stock shall not be entitled to receive the Additional Preference; provided, further, that if the Initial Payment is less than $250,000,000 and the portion of all additional consideration (exclusive of any portion of the Initial Payment) that becomes earned or payable to the stockholders of the Corporation on or before the one (1) year anniversary of the closing of such Liquidation Transaction (collectively, the "Additional Payments") when combined with the Initial Payment is equal to or greater than $250,000,000, the holders of Series F-1 Preferred Stock shall be entitled to receive the Additional Preference which, in such case, shall be payable out of such Additional Payments. If such Additional Payments are insufficient to permit payment in full of the Additional Preference, such Additional Preference shall be paid prior and in preference to any distribution of any assets or any such consideration under Sections 2(a)(i), (ii), (iii) and (iv) above and Section 2(b) below, until the entire Additional Preference is paid to each holder of Series F-1 Preferred Stock. If, upon the occurrence of such Liquidation Transaction, the assets and funds thus distributed among the holders of the Series F-1 Preferred Stock shall be insufficient to permit the payment to the holders of the Series F-1 Preferred Stock of the full aforesaid Additional Preference pursuant to this Section 2(a)(v), then the entire assets and funds of the Corporation legally available for distribution under this Section 2(a)(v) shall be distributed with equal priority and ratably among the holders of the Series F-1 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive pursuant to this Section 2(a)(v) until such time as all amounts payable under this Section 2(a)(v) shall have been received by the holders of Series F-1 Preferred Stock. For purposes of this Section 2(a)(v), "Additional Preference" shall mean (i) if the sum of the Initial Payment and all Additional Payments is equal to or greater than $250,000,000 but less than $300,000,000, an amount equal to $0.33 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 Preferred Stock then held by them, (ii) if the sum of the Initial Payment and all Additional Payments is equal to or greater than $300,000,000 but less than $350,000,000, an amount equal to $0.50 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share

of Series F-1 Preferred Stock then held by them, and (iii) if the sum of the Initial Payment and all Additional Payments is equal to or greater than $350,000,000, an amount equal to $0.66 per share (as adjusted for stock splits, stock dividends, reclassifications and the like) for each share of Series F-1 Preferred Stock then held by them.

(b) **Remaining Assets**. Upon the completion of the distributions required by Sections 2(a)(i), (ii), (iii), (iv) and (v) above, if assets or any such consideration remain in the Corporation, then the remaining assets and funds of the Corporation legally available for distribution shall be paid as follows: the holders of the Common Stock, the Series A-1 Preferred Stock, the Series B-1 Preferred Stock, the Series C-1 Preferred Stock, the Series D-1 Preferred Stock, the Series E-1 Preferred Stock, the Series F-1 Preferred Stock and the Series G-1 Preferred Stock shall share in the remaining assets and funds of the Corporation legally available for distribution on a pro rata basis as if the Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred Stock, Series E-1 Preferred Stock, Series F-1 Preferred Stock and Series G-1 Preferred Stock were converted into Common Stock at then-applicable Conversion Rate until, as to the Series A-1 Preferred Stock, the holders of the Series A-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(iv) above) equal to $2.877 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series A-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series A-1 Preferred Stock), and as to the Series B-1 Preferred Stock, the holders of the Series B-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(iv) above) equal to $3.171 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series B-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series B-1 Preferred Stock), and as to the Series C-1 Preferred Stock, the holders of the Series C-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(iv) above) equal to $3.171 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series C-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series C-1 Preferred Stock), and as to the Series D-1 Preferred Stock, the holders of the Series D-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(iv) above) equal to $3.30 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series D-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series D-1 Preferred Stock), and as to the Series E-1 Preferred Stock, the holders of the Series E-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(iii) above) equal to $3.90 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series E-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series E-1 Preferred Stock), and as to the Series F-1 Preferred Stock, the holders of the Series F-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(ii) above, but excluding the amount received pursuant to Section 2(a)(v) above) equal to $3.96 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series F-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series F-1 Preferred Stock), and as to the Series G-1 Preferred Stock, the holders of the Series G-1 Preferred Stock shall have received an aggregate amount (including the amount received pursuant to Section 2(a)(i) above) equal to $3.96 per

share (as adjusted for stock splits, stock dividends, reclassifications or the like) of Series G-1 Preferred Stock (plus an amount equal to all declared but unpaid dividends on the Series G-1 Preferred Stock), and the holders of the Common Stock shall be entitled to receive ratably on a per-share basis all the remaining assets and funds of the Corporation legally available for distribution.

(c) **Certain Acquisitions**.

(i) **Deemed Liquidation**. For purposes of this Section 2, a liquidation, dissolution, or winding up of the Corporation shall be deemed to occur if (A) the Corporation or any of its subsidiaries shall sell, convey, or otherwise dispose of all or substantially all of the property or business of the Corporation and its subsidiaries taken as a whole, (B) the Corporation merges with or into or consolidates, whether in a single transaction or a series of related transactions, with any other corporation, limited liability company or other entity (other than a wholly-owned subsidiary of the Corporation), (C) one or more subsidiaries of the Corporation merges with or into or consolidates, whether in a single transaction or a series of related transactions, with any other corporation, limited liability company or other entity (other than a wholly-owned subsidiary of the Corporation) if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, or (D) the Corporation or any of its subsidiaries grants an exclusive license to all or substantially all of the Corporation's intellectual property that is used to generate all or substantially all of the revenues of the Corporation and its subsidiaries taken as a whole (any such transaction, a "Liquidation Transaction"), provided that none of the following shall be considered a Liquidation Transaction: (i) a merger effected exclusively for the purpose of changing the domicile of the Corporation, (ii) an equity financing primarily for the purpose of funding the Corporation's business operations, (iii) a transaction in which the stockholders of the Corporation immediately prior to the transaction own more than 50% of the voting power of the surviving corporation following the transaction, or (iv) a transaction that the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, agree not to treat as a Liquidation Transaction.

(ii) **Valuation of Consideration**. In the event of a Liquidation Transaction, if the consideration received by the Corporation is other than cash, its value will be deemed its fair market value as determined in good faith by the Board of Directors. Any securities shall be valued as follows:

(A) Securities not subject to investment letter or other similar restrictions on free marketability:

(1) If traded on a securities exchange or The Nasdaq Stock Market ("Nasdaq"), the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the thirty (30) day period (or portion thereof) ending three (3) days prior to the closing;

(2) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the thirty (30) day period (or portion thereof) ending three (3) days prior to the closing; and

(3) If there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors.

(B) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a shareholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as specified above in Section 2(c)(ii)(A) to reflect the approximate fair market value thereof, as determined in good faith by the Board of Directors.

(C) The Corporation shall, upon receipt of such determination, give prompt written notice of the determination to each holder of shares of Preferred Stock or Common Stock.

(D) In the event of a Liquidation Transaction, the date of the distribution shall be deemed to be the date such transaction closes.

(iii) **Notice of Liquidation Transaction**. The Corporation shall give each holder of record of Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred Stock, Series E-1 Preferred Stock, Series F-1 Preferred Stock and Series G-1 Preferred Stock written notice of any impending Liquidation Transaction not later than 20 days prior to the stockholders' meeting called to approve such Liquidation Transaction, or 20 days prior to the closing of such Liquidation Transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such Liquidation Transaction. The first of such notices shall describe the material terms and conditions of the impending Liquidation Transaction and the provisions of this Section 2, and the Corporation shall thereafter give such holders prompt notice of any material changes. Unless such notice requirements are waived, the Liquidation Transaction shall not take place sooner than 20 days after the Corporation has given the first notice provided for herein or sooner than 10 days after the Corporation has given notice of any material changes provided for herein. Notwithstanding the other provisions of this Restated Certificate, all notice periods or requirements in this Section 2(c)(iii) may be shortened or waived, either before or after the action for which notice is required, upon the written consent of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class.

(iv) **Allocation of Escrow**. In the event of a Liquidation Transaction, if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the agreement or plan of merger or consolidation for such transaction shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the "Initial Consideration") shall be allocated among the stockholders of the

Corporation in accordance with this Section 2 as if the Initial Consideration were the only consideration payable in connection with such Liquidation Transaction and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with this Section 2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

(v) **Effect of Noncompliance**. In the event the requirements of this Section 2(c) are not complied with, the Corporation shall forthwith either cause the closing of the Liquidation Transaction to be postponed until the requirements of this Section 2 have been complied with, or cancel such Liquidation Transaction, in which event the rights, preferences, privileges and restrictions of the holders of Preferred Stock shall revert to and be the same as such rights, preferences, privileges and restrictions existing immediately prior to the date of the first notice referred to in Section 2(c)(iii).

3. **Redemption**. The Preferred Stock is not redeemable.

4. **Conversion**. The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) **Right to Convert**. Subject to Section 4(c), each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for such stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (i) $0.959 in the case of the Series A-1 Preferred Stock, (ii) $1.057 in the case of the Series B-1 Preferred Stock, (iii) $1.057 in the case of the Series C-1 Preferred Stock, (iv) $1.10 in the case of the Series D-1 Preferred Stock, (v) $1.30 in the case of the Series E-1 Preferred Stock, (vi) $1.32 in the case of the Series F-1 Preferred Stock and (vii) $1.32 in the case of the Series G-1 Preferred Stock, by the Conversion Price applicable to such share, determined as hereafter provided, in effect on the date the certificate is surrendered for conversion. The initial "Conversion Price" per share shall be $0.959 for the Series A-1 Preferred Stock, $1.057 for the Series B-1 Preferred Stock, $1.057 for the Series C-1 Preferred Stock, $1.10 for the Series D-1 Preferred Stock, $1.30 for the Series E-1 Preferred Stock, $1.32 for the Series F-1 Preferred Stock and $1.32 for the Series G-1 Preferred Stock. Such initial Conversion Price shall be subject to adjustment as set forth in Sections 4(b) and 4(d). The number of shares of Common Stock into which each share of Preferred Stock of a series may be converted is referred to herein as the "Conversion Rate" for each such series.

(b) **Automatic Conversion**. Each share of Preferred Stock shall automatically be converted into fully paid, non-assessable shares of Common Stock at the Conversion Rate at the time in effect for such share immediately upon the earlier of (i) except as provided below in Section 4(c), the Corporation's sale of its Common Stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended (the "Securities Act") (the "IPO"), which results in aggregate cash proceeds to the Corporation of not less than $30,000,000 (net of underwriting discounts and

commissions) or (ii) the date specified by the vote or written consent of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class; provided however, that if the Preferred Stock is converted in connection with an IPO and the offering price to the public in the IPO (the "Public Offering Price") is less than 1.15 times the Conversion Price of the Series G-1 Preferred Stock in effect immediately prior to the IPO, then the Conversion Price for the Series G-1 Preferred Stock shall be adjusted such that, upon the closing of the IPO, each share of Series G-1 Preferred Stock will convert into that number of shares of Common Stock equal to the sum of (a) the number of shares of Common Stock issuable upon conversion of such share of Series G-1 Preferred Stock immediately prior to the IPO (the "Pre-IPO Shares") and (b) an additional number of shares of Common Stock determined by multiplying the Pre-IPO Shares by the quotient of (x) the difference between 1.15 times the Conversion Price of the Series G-1 Preferred Stock immediately prior to the IPO and the Public Offering Price, divided by (y) the Public Offering Price. For purposes of this Section C of Article IV, "Qualified IPO" shall mean any public offering prior to or in connection with which all shares of Preferred Stock are converted into shares of Common Stock.

(c) **Mechanics of Conversion**. Before any holder of Preferred Stock shall be entitled to convert such Preferred Stock into shares of Common Stock, the holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for such series of Preferred Stock, and shall give written notice to the Corporation at its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of such series of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with an underwritten public offering of securities registered pursuant to the Securities Act, the conversion may, at the option of any holder tendering such Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event any persons entitled to receive Common Stock upon conversion of such Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities.

(d) **Conversion Price Adjustments of Preferred Stock for Certain Dilutive Issuances, Splits and Combinations**. The Conversion Price of the Preferred Stock shall be subject to adjustment from time to time as follows:

(i) **Issuance of Additional Stock below Purchase Price.** If the Corporation should issue, at any time after the date upon which any shares of Series G-1 Preferred Stock were first issued (the "Purchase Date" with respect to such series), any Additional Stock (as defined below) without consideration or for a consideration per share less

than the Conversion Price for such series in effect immediately prior to the issuance of such Additional Stock, the Conversion Price for such series in effect immediately prior to each such issuance shall automatically be adjusted as set forth in this Section 4(d)(i), unless otherwise provided in this Section 4(d)(i).

(A) **Adjustment Formula**. Whenever the Conversion Price is adjusted pursuant to this Section (4)(d)(i), the new Conversion Price shall be determined by multiplying the Conversion Price then in effect by a fraction, (x) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (the "Outstanding Common") plus the number of shares of Common Stock that the aggregate consideration received by the Corporation for such issuance (as determined pursuant to Section 4(d)(i)(D) and, if applicable, Section 4(d)(i)(E)) would purchase at such Conversion Price then in effect; and (y) the denominator of which shall be the number of shares of Outstanding Common plus the number of shares of such Additional Stock. For purposes of the foregoing calculation, the term "Outstanding Common" shall include shares of Common Stock deemed issued pursuant to Section 4(d)(i)(E) below.

(B) **Definition of "Additional Stock".** For purposes of this Section 4(d)(i), "Additional Stock" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to Section 4(d)(i)(E)) by the Corporation after the Purchase Date) other than:

(1) Common Stock issued pursuant to stock dividends, stock splits, recapitalizations or similar transactions, as described in Section 4(d)(ii) hereof;

(2) Shares of Common Stock issued or issuable to employees, consultants or directors of the Corporation directly or pursuant to a stock option plan, restricted stock plan or other similar plan or agreement, which issuance and plan or agreement are approved by the Board of Directors of the Corporation;

(3) Capital stock, or options or warrants to purchase capital stock, issued to financial institutions or lessors in connection with commercial credit arrangements, equipment financings, commercial property lease transactions or similar transactions, the terms of which issuances and transactions are approved by the Board of Directors of the Corporation;

(4) Securities issued in connection with bona fide acquisitions of other corporations or entities pursuant to a merger, consolidation, purchase of assets, reorganization or similar transactions in which the Corporation acquires all or substantially all of the assets of such corporation or entity or 50% or more of the equity ownership in such corporation or entity, the terms of which issuance and transaction are approved by the Board of Directors of the Corporation;

(5) Shares of Common Stock issued or issuable upon conversion of the Preferred Stock;

(6) Shares of Common Stock issued or issuable in a Qualified IPO;

(7) Capital stock issued or issuable to an entity as a component of any corporate strategic relationship with such entity for the purpose of (A) joint venture, technology licensing or development activities, (B) distribution, supply or manufacture of the Corporation's products or services or (C) any other arrangements involving corporate partners that are primarily for purposes other than raising capital, the terms of which issuance to and business relationship with such entity are approved by the Board of Directors of the Corporation;

(8) Shares of Common Stock or Preferred Stock issued or issuable upon exercise of warrants or options outstanding as of the Purchase Date; and

(9) Shares of Common Stock issued or issuable in connection with any transaction where the securities so issued are excepted from the definition "Additional Stock" by the affirmative vote of (A) the holders of at least a majority of the Preferred Stock and (B) a majority of the Preferred Directors.

(C) **No Fractional Adjustments**. No adjustment of the Conversion Price for the Preferred Stock shall be made in an amount less than one cent per share, provided that any adjustments which are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three years from the date of the event giving rise to the adjustment being carried forward, or shall be made at the end of three years from the date of the event giving rise to the adjustment being carried forward.

(D) **Determination of Consideration**. In the case of the issuance of Common Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with the issuance and sale thereof. In the case of the issuance of the Common Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined in good faith by the Board of Directors irrespective of any accounting treatment.

(E) **Deemed Issuances of Common Stock**. In the case of the issuance or sale (whether before, on or after the applicable Purchase Date) of securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (the "Common Stock Equivalents"), the following provisions shall apply for all purposes of this Section 4(d)(i):

(1) The aggregate maximum number of shares of Common Stock deliverable upon conversion, exchange or exercise (assuming the satisfaction of any conditions to convertibility, exchangeability or exercisability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) of any Common Stock Equivalents and subsequent conversion, exchange or exercise thereof shall be deemed to have been issued at the time such securities were issued or sold or such Common Stock Equivalents were issued or sold and for a consideration equal to the consideration, if any, received by the Corporation for any such securities and related Common Stock Equivalents (excluding any cash received on account of accrued interest or accrued dividends), plus the minimum additional consideration, if any, to be received by the Corporation (without taking into account potential antidilution adjustments) upon the conversion, exchange or exercise of any Common Stock Equivalents (the consideration in each case to be determined in the manner provided in Section 4(d)(i)(D)).

(2) In the event of any change in the number of shares of Common Stock deliverable or in the consideration payable to the Corporation upon conversion, exchange or exercise of any Common Stock Equivalents including, but not limited to, a change resulting from the antidilution provisions thereof, the Conversion Price of the Preferred Stock, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the conversion, exchange or exercise of such Common Stock Equivalents.

(3) Upon the termination or expiration of the convertibility, exchangeability or exercisability of any Common Stock Equivalents, the Conversion Price of the Preferred Stock, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect the issuance of only the number of shares of Common Stock (and Common Stock Equivalents that remain convertible, exchangeable or exercisable) actually issued upon the conversion, exchange or exercise of such Common Stock Equivalents.

(4) The number of shares of Common Stock deemed issued and the consideration deemed paid therefor pursuant to Section 4(d)(i)(E)(1) shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either Section 4(d)(i)(E)(2) or 4(d)(i)(E)(3).

(F) **No Increased Conversion Price**. Notwithstanding any other provisions of this Section (4)(d)(i), except to the limited extent provided for in Sections 4(d)(i)(E)(2) and 4(d)(i)(E)(3), no adjustment of the Conversion Price pursuant to this Section 4(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment.

(ii) **Stock Splits and Dividends**. In the event the Corporation should at any time after the Purchase Date fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of

Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or Common Stock Equivalents without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend distribution, split or subdivision if no record date is fixed), the Conversion Price of the Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase of the aggregate of shares of Common Stock outstanding and those issuable with respect to such Common Stock Equivalents with the number of shares issuable with respect to Common Stock Equivalents determined from time to time in the manner provided for deemed issuances in Section 4(d)(i)(E).

(iii) **Reverse Stock Splits**. If the number of shares of Common Stock outstanding at any time after the Purchase Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Price for the Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in outstanding shares.

(e) **Other Distributions**. In the event the Corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by the Corporation or other persons, assets (excluding cash dividends) or options or rights not referred to in Section 4(d)(ii), then, in each such case for the purpose of this Section 4(e), the holders of Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of the Corporation into which their shares of Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of the Corporation entitled to receive such distribution.

(f) **Recapitalizations**. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in this Section 4 or in Section 2) provision shall be made so that the holders of the Preferred Stock shall thereafter be entitled to receive upon conversion of such Preferred Stock the number of shares of stock or other securities or property of the Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of such Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the Conversion Price then in effect and the number of shares purchasable upon conversion of such Preferred Stock) shall be applicable after that event and be as nearly equivalent as practicable.

(g) **No Impairment**. The Corporation will not, by amendment of this Restated Certificate (except in accordance with applicable law) or through any reorganization, recapitalization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the

terms to be observed or performed hereunder by the Corporation, but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of Preferred Stock against impairment. This provision shall not restrict the Corporation's right to amend this Restated Certificate with the requisite shareholder consent.

(h) **No Fractional Shares and Certificate as to Adjustments**.

(i) No fractional shares shall be issued upon the conversion of any share or shares of Preferred Stock. In lieu of fractional shares, the Corporation will pay cash in an amount equal to the fair value of such fractional shares, based on the fair market value of the shares of Common Stock, as determined in good faith by the Board of Directors, as of the time when those who would otherwise be entitled to receive such fractional shares is determined. The number of shares issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such aggregate conversion.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of the Preferred Stock pursuant to this Section 4, the Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of such Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price for the Preferred Stock at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of a share of the Preferred Stock.

(i) **Notices of Record Date**. In the event of any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall mail to each holder of Preferred Stock, at least 20 days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

(j) **Reservation of Stock Issuable Upon Conversion**. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of such series of Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of such series of Preferred Stock,

in addition to such other remedies as shall be available to the holder of such Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite shareholder approval of any necessary amendment to this Restated Certificate.

(k) **Notices**. Any notice required by the provisions of this Section 4 to be given to the holders of shares of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

5. **Voting Rights**. Except as expressly provided by this Restated Certificate or as provided by law, the holders of Preferred Stock shall have the same voting rights as the holders of Common Stock and shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation, and the holders of Common Stock and the Preferred Stock shall vote together as a single class on all matters. Each holder of Common Stock shall be entitled to one vote for each share of Common Stock held, and each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock could be converted. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

6. **Election of Directors.**

(a) For so long as there are outstanding at least 500,000 shares of Series A-1 Preferred Stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series A-1 Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member (the "Series A-1 Director") of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors.

(b) For so long as there are outstanding at least 500,000 shares of Series B-1 Preferred Stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series B-1 Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members (the "Series B-1 Directors") of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors.

(c) For so long as there are outstanding at least 500,000 shares of Series C-1 Preferred Stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series C-1 Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members (the "Series C-1 Directors") of the Corporation's Board of

Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors.

(d) For so long as there are outstanding at least 500,000 shares of Series G-1 Preferred Stock (as adjusted for stock splits, reclassifications or other similar transactions), the holders of Series G-1 Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member (the "Series G-1 Director", and together with the Series A-1 Director, the Series B-1 Directors and the Series C-1 Directors, the "Preferred Directors") of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors.

(e) The holders of Common Stock and Preferred Stock, voting together as a single class on an as-if-converted basis, shall be entitled to elect all remaining members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors.

7. **Protective Provisions**.

(a) So long as at least 500,000 shares of Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class:

(i) effect any liquidation, dissolution or winding up of the Corporation or effect a Liquidation Transaction;

(ii) amend, alter, repeal, waive or change the rights, preferences, privileges or powers of the shares of Preferred Stock so as to affect materially and adversely the shares of such series;

(iii) increase or decrease (other than by conversion) the total number of authorized number of any class or series of stock;

(iv) redeem, purchase or otherwise acquire (or pay into or set funds aside for a sinking fund for such purpose) any share or shares of Preferred Stock or Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock from employees, officers, directors, consultants or other persons performing services for the Corporation or any subsidiary pursuant to agreements under which the Corporation has the option to repurchase such shares at no greater than cost upon the occurrence of certain events, such as the termination of employment, or through the exercise of any right of first refusal;

(v) amend this Restated Certificate or the Corporation's Bylaws;

(vi) authorize, create (by reclassification, merger or otherwise) or issue, or obligate itself to issue, any other equity security, including any security (other than Series A-1 Preferred Stock, Series B-1 Preferred Stock, Series C-1 Preferred Stock, Series D-1 Preferred Stock, Series E-1 Preferred Stock, Series F-1 Preferred Stock or Series G-1 Preferred Stock) convertible into or exercisable for any equity security, having a preference over, or being on a parity with, the Preferred Stock with respect to voting, dividends, conversion, redemption or upon liquidation;

(vii) declare or pay dividends on or make any distribution with respect to any shares of Common Stock (other than a dividend payable solely in shares of Common Stock);

(viii) change the number of authorized directors of the Corporation to less than seven (7) or more than ten (10) directors, or decrease the number of authorized directors of the Corporation to below the number of directors then in office; and

(ix) amend the MIP to change the total amount of the Carve Out Amount (as such term is defined in the MIP) or to change the order or preference in which the MIP participates in the proceeds otherwise distributable to the holders of Preferred Stock in accordance with Section 2, or create or enter into any new or similar management incentive plan.

(b) So long as at least 500,000 shares of Series A-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the outstanding shares of Series A-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series A-1 Preferred Stock or (ii) increase or decrease the authorized number of shares of Series A-1 Preferred Stock.

(c) So long as at least 500,000 shares of Series B-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the outstanding shares of Series B-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series B-1 Preferred Stock; or (ii) increase or decrease the authorized number of shares of Series B-1 Preferred Stock.

(d) So long as at least 500,000 shares of Series C-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the outstanding shares of Series C-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights,

preferences, privileges or powers of or restrictions on the Series C-1 Preferred Stock; (ii) increase or decrease the authorized number of shares of Series C-1 Preferred Stock; or (iii) alter or change the economic terms of any series of Preferred Stock (including, but not limited to, those terms relating to the conversion price, dividend rate, or liquidation preferences) so as to improve such economic terms of such series of Preferred Stock unless comparable alteration or change is made to the comparable economic terms of the Series C-1 Preferred Stock to the extent relevant.

(e) So long as at least 500,000 shares of Series D-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the outstanding shares of Series D-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series D-1 Preferred Stock; (ii) increase or decrease the authorized number of shares of Series D-1 Preferred Stock; or (iii) alter or change the economic terms of any series of Preferred Stock (including, but not limited to, those terms relating to the conversion price, dividend rate, or liquidation preferences) so as to improve such economic terms of such series of Preferred Stock unless comparable alteration or change is made to the comparable economic terms of the Series D-1 Preferred Stock to the extent relevant.

(f) So long as at least 500,000 shares of Series E-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least 70% of the then outstanding shares of Series E-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series E-1 Preferred Stock; (ii) increase or decrease the authorized number of shares of Series E-1 Preferred Stock; or (iii) alter or change the economic terms of any series of Preferred Stock (including, but not limited to, those terms relating to the conversion price, dividend rate, or liquidation preferences) so as to improve such economic terms of such series of Preferred Stock unless comparable alteration or change is made to the comparable economic terms of the Series E-1 Preferred Stock to the extent relevant.

(g) So long as at least 500,000 shares of Series F-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Series F-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series F-1 Preferred Stock; (ii) increase or decrease the authorized number of shares of Series F-1 Preferred Stock; (iii) alter or change the economic terms of any series of Preferred Stock (including, but not limited to, those

terms relating to the conversion price, dividend rate, or liquidation preferences) so as to improve such economic terms of such series of Preferred Stock unless comparable alteration or change is made to the comparable economic terms of the Series F-1 Preferred Stock to the extent relevant; or (iv) amend the MIP so as to adversely effect the rights of the Series F-1 Preferred Stock in a manner different than any other series of Preferred Stock, or create or enter into any new or similar management incentive plan.

(h) So long as at least 500,000 shares of Series G-1 Preferred Stock are outstanding (as adjusted for stock splits, stock dividends, reclassifications or the like), the Corporation shall not (by amendment, merger, consolidation or otherwise) without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Series G-1 Preferred Stock: (i) amend, alter or repeal any provision of this Restated Certificate or the Corporation's Bylaws if it would adversely alter the rights, preferences, privileges or powers of or restrictions on the Series G-1 Preferred Stock; (ii) increase or decrease the authorized number of shares of Series G-1 Preferred Stock; (iii) alter or change the economic terms of any series of Preferred Stock (including, but not limited to, those terms relating to the conversion price, dividend rate, or liquidation preferences) so as to improve such economic terms of such series of Preferred Stock unless comparable alteration or change is made to the comparable economic terms of the Series G-1 Preferred Stock to the extent relevant; or (iv) amend the MIP so as to adversely effect the rights of the Series G-1 Preferred Stock in a manner different than any other series of Preferred Stock, or create or enter into any new or similar management incentive plan.

8. **Status of Converted Stock**. In the event any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted shall be cancelled and shall not be issuable by the Corporation. This Restated Certificate shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

(D) **Common Stock.**

1. **Dividend Rights**. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when and as declared by the Board of Directors, out of any assets of the Corporation legally available therefor, such dividends as may be declared from time to time by the Board of Directors.

2. **Liquidation Rights**. Upon the liquidation, dissolution or winding up of the Corporation, or the occurrence of a Liquidation Transaction, the assets of the Corporation shall be distributed as provided in Section 2 of Section C of Article IV.

3. **Redemption**. The Common Stock is not redeemable.

4. **Voting Rights**. Each holder of Common Stock shall have the right to one vote per share of Common Stock, and shall be entitled to notice of any stockholders' meeting in

accordance with the Bylaws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law.

ARTICLE V

The Board of Directors of the Corporation is expressly authorized to make, alter or repeal Bylaws of the Corporation.

ARTICLE VI

Elections of directors need not be by written ballot unless otherwise provided in the Bylaws of the Corporation.

ARTICLE VII

(A) To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

(B) The Corporation shall indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he, his testator or intestate is or was a director or officer of the Corporation or any predecessor of the Corporation, or serves or served at any other enterprise as a director or officer at the request of the Corporation or any predecessor to the Corporation.

(C) If a Covered Person (as defined below) (1) acquires knowledge of a Corporate Opportunity (as defined below) or (2) is then otherwise pursuing a Corporate Opportunity, unless such Corporate Opportunity is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation or pursuant to contractual rights with the Corporation to observe the proceedings of the Board of Directors:

(a) the Corporation shall have no expectation that such Corporate Opportunity will be offered to it, and

(b) the Covered Persons (i) shall have no duty to communicate or present such Corporate Opportunity to the Corporation, shall have the right to hold such Corporate Opportunity for the Covered Person's (and its officers', directors', agents', stockholders', Affiliates' or subsidiaries') own account, or to recommend, assign or otherwise transfer such Corporate Opportunity to persons other than the Corporation, and (ii) shall not be liable to the Corporation or its stockholders or creditors for breach of fiduciary duty as a director or stockholder of the Corporation by reason of the fact that the Covered Persons pursued or acquired such Corporate Opportunity for itself, directed, sold, assigned or otherwise transferred such Corporate Opportunity to another person, or

did not communicate information regarding such Corporate Opportunity to the Corporation,

it being understood that the foregoing shall not constitute a waiver of any right the Corporation may have as a result of a breach of a contract between the Corporation and any Covered Person.

For the purposes of this Section (C):

(a) "Affiliate" of any Person (as defined below) shall mean any other Person that, directly or indirectly, controls, is under common control with or is controlled by that Person; provided, however, that neither the term "Affiliate" nor the waivers and protections contained in this Section (C), shall include or extend to any Person who serves as an officer, or employee of the Corporation. For purposes of this definition, "control" (including, with its correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any Person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities or by contract or otherwise.

(b) "Corporate Opportunity" shall mean any matter, transaction, interest, investment, development or business opportunity or prospective economic or competitive advantage in which the Corporation could have an interest or expectancy.

(c) "Covered Person" shall mean (A) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries or (B) any holder of shares of Preferred Stock or any Affiliate, parent, subsidiary, partner, member, director, stockholder, employee or agent of any agent of any such holder or holder's Affiliate, other than someone who is an employee of the Corporation or any of its subsidiaries.

(d) "Person" shall mean an individual, corporation, partnership, limited liability company, trust, unincorporated organization, or other legal entity.

Without limiting the foregoing renunciation, the Corporation (1) acknowledges that the Covered Persons are in the business of making investments in, and have or may have investments in, other businesses similar to and that may compete with the Corporation's businesses ("Competing Businesses"), and (2) agrees that the Covered Persons shall have the unfettered right to make investments in or have relationships with Competing Businesses independent of their investments in the Corporation; provided that each Covered Person agrees to keep in confidence and prevent the use or disclosure to any other person or entity of the confidential information of the Corporation.

Notwithstanding anything in this Restated Certificate to the contrary, this Section (C) may not be amended, waived or terminated without the approval by vote or written consent of (i) the holders of at least a majority of the Series F-1 Preferred Stock and (ii) the holders of at least a majority of the Series G-1 Preferred Stock, voting separately.

(D) Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article VII, shall eliminate or reduce the effect of this Article VII in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article VII, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

* * *

The foregoing Amended and Restated Certificate of Incorporation has been duly adopted by this Corporation's Board of Directors and stockholders in accordance with the applicable provisions of Sections 228, 242 and 245 of the Delaware General Corporation Law.

Executed this 15th day of April 2019.

/s/ Glendon E. French

Glendon E. French, President

AMENDED AND RESTATED BYLAWS

OF

PULMONX CORPORATION

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AMENDED AND RESTATED BYLAWS

OF

PULMONX CORPORATION

ARTICLE I

CORPORATE OFFICES

1.1 **Registered Office.**

The registered office of the corporation shall be in the City of Wilmington, County of NewCastle, State of Delaware. The name of the registered agent of the corporation at such location is Corporation Trust Company.

1.2 **Other Offices.**

The Board of Directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II

MEETINGS OF STOCKHOLDERS

2.1 **Place Of Meetings.**

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the Board of Directors. In the absence of any such designation, stockholders' meetings shall be held at the registered office of the corporation.

2.2 **Annual Meeting.**

The annual meeting of stockholders shall be held on such date, time and place, either within or without the State of Delaware, as may be designated by resolution of the Board of Directors each year. At the meeting, directors shall be elected and any other proper business may be transacted.

2.3 **Special Meeting.**

A special meeting of the stockholders may be called at any time by the Board of Directors, the chairman of the board, the president or by one or more stockholders holding shares in the aggregate entitled to cast not less than ten percent of the votes at that meeting.

If a special meeting is called by any person or persons other than the Board of Directors, the president or the chairman of the board, the request shall be in writing, specifying the time of such meeting and the general nature of the business proposed to be transacted, and

shall be delivered personally or sent by registered mail or by electronic or other facsimile transmission to the chairman of the board, the president, any vice president, or the secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The officer receiving the request shall cause notice to be promptly given to the stockholders entitled to vote, in accordance with the provisions of Sections 2.4 and 2.5 of this Article II, that a meeting will be held at the time requested by the person or persons calling the meeting, not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after the receipt of the request, the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

2.4 **Notice Of Stockholders' Meetings.**

All notices of meetings with stockholders shall be in writing and shall be sent or otherwise given in accordance with Section 2.5 of these Bylaws not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place (if any), date and hour of the meeting, and in the case of a special meeting, the purpose or purposes for which the meeting is called.

2.5 **Manner Of Giving Notice; Affidavit Of Notice.**

Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his address as it appears on the records of the corporation. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders may be given by electronic mail or other electronic transmission, in the manner provided in Section 232 of the Delaware General Corporation Law. An affidavit of the secretary or an assistant secretary or of the transfer agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

2.6 **Quorum.**

The holders of a majority of the shares of stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum is not present or represented at any meeting of the stockholders, then either (a) the chairman of the meeting or (b) holders of a majority of the shares of stock entitled to vote who are present, in person or by proxy, shall have power to adjourn the meeting to another place (if any), date or time.

2.7 **Adjourned Meeting; Notice.**

When a meeting is adjourned to another place (if any), date or time, unless these Bylaws otherwise require, notice need not be given of the adjourned meeting if the time and place (if any), thereof and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present and vote at such adjourned meeting, are announced at the meeting at which the adjournment is taken. At the adjourned meeting the

corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or a new record date is affixed for the adjourned meeting, notice of the place (if any), date and time of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

2.8 **Organization; Conduct of Business.**

(a) Such person as the Board of Directors may have designated or, in the absence of such a person, the President of the corporation or, in his or her absence, such person as may be chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, shall call to order any meeting of the stockholders and act as Chairman of the meeting. In the absence of the Secretary of the corporation, the Secretary of the meeting shall be such person as the Chairman of the meeting appoints.

(b) The Chairman of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including the manner of voting and the conduct of business. The date and time of opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting.

2.9 **Voting.**

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.12 of these Bylaws, subject to the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners of stock and to voting trusts and other voting agreements).

Except as may be otherwise provided in the certificate of incorporation, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder. All elections shall be determined by a plurality of the votes cast, and except as otherwise required by law, all other matters shall be determined by a majority of the votes cast affirmatively or negatively.

2.10 **Waiver Of Notice.**

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, or waiver by electronic mail or other electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice unless so required by the certificate of incorporation or these Bylaws.

2.11 **Stockholder Action By Written Consent Without A Meeting.**

Unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders of the corporation, or any action that may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice, and without a vote if a consent in writing, setting forth the action so taken, is (i) signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted, and (ii) delivered to the corporation in accordance with Section 228(a) of the Delaware General Corporation Law.

Every written consent shall bear the date of signature of each stockholder who signs the consent and no written consent shall be effective to take the corporate action referred to therein unless, within sixty (60) days of the date the earliest dated consent is delivered to the corporation, a written consent or consents signed by a sufficient number of holders to take action are delivered to the corporation in the manner prescribed in this Section. Electronic mail or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for purposes of this Section to the extent permitted by law. Any such consent shall be delivered in accordance with Section 228(d)(1) of the Delaware General Corporation Law.

Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing (including by electronic mail or other electronic transmission as permitted by law). If the action which is consented to is such as would have required the filing of a certificate under any section of the General Corporation Law of Delaware if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written notice and written consent have been given as provided in Section 228 of the General Corporation Law of Delaware.

2.12 **Record Date For Stockholder Notice; Voting; Giving Consents.**

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action.

If the Board of Directors does not so fix a record date:

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) The record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is necessary, shall be the day on which the first written consent (including consent by electronic mail or other electronic transmission as permitted by law) is delivered to the corporation.

(c) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, if such adjournment is for thirty (30) days or less; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

2.13 **Proxies.**

Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by an instrument in writing or by an electronic transmission permitted by law filed with the secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A proxy shall be deemed signed if the stockholder’s name is placed on the proxy (whether by manual signature, typewriting, facsimile, or electronic transmission or otherwise) by the stockholder or the stockholder’s attorney-in-fact. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

ARTICLE III

DIRECTORS

3.1 **Powers.**

Subject to the provisions of the General Corporation Law of Delaware and any limitations in the certificate of incorporation or these Bylaws relating to action required to be approved by the stockholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the Board of Directors.

3.2 **Number Of Directors.**

The authorized number of directors constituting the entire Board of Directors shall be not less than seven (7) nor more than ten (10). Within this range, the authorized number of directors may be fixed from time to time by resolution of the Board of Directors. Any amendment to these Bylaws changing the authorized number of directors (except to fix the authorized number of directors within the range) may only be adopted by the affirmative vote of at least a majority of the voting power of all the then outstanding shares of the voting stock of the corporation entitled to vote.

3.3 **Election, Qualification And Term Of Office Of Directors.**

Except as provided in Section 3.4 of these Bylaws, and unless otherwise provided in the certificate of incorporation, directors shall be elected at each annual meeting of stockholders to hold office until the next annual meeting. Directors need not be stockholders unless so required by the certificate of incorporation or these Bylaws, wherein other qualifications for directors may be prescribed. Each director, including a director elected to fill a vacancy, shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Unless otherwise specified in the certificate of incorporation, elections of directors need not be by written ballot.

3.4 **Resignation And Vacancies.**

Any director may resign at any time upon written notice to the attention of the Secretary of the corporation. When one or more directors so resigns and the resignation is effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in this section in the filling of other vacancies.

Unless otherwise provided in the certificate of incorporation or these Bylaws:

(a) Vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a

single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

(b) Whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these Bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211(c) of the General Corporation Law of Delaware.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board (as constituted immediately prior to any such increase), then the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten (10%) percent of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the General Corporation Law of Delaware as far as applicable.

3.5 **Place Of Meetings; Meetings By Telephone.**

The Board of Directors of the corporation may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these Bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 **Regular Meetings.**

Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the board.

3.7 **Special Meetings; Notice.**

Special meetings of the Board of Directors for any purpose or purposes may be called at any time by the chairman of the board, the president, any vice president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail, facsimile or electronic transmission, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered personally by facsimile, by electronic transmission or by telephone, it shall be delivered at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

3.8 **Quorum.**

At all meetings of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the Board of Directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 **Waiver Of Notice.**

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware or of the certificate of incorporation or these Bylaws, a written waiver thereof, signed by the person entitled to notice, or waiver by electronic mail or other electronic transmission by such person, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the directors, or members of a committee of directors, need be specified in any written waiver of notice unless so required by the certificate of incorporation or these Bylaws.

3.10 **Board Action By Written Consent Without A Meeting.**

Unless otherwise restricted by the certificate of incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the board or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or

writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

3.11 **Fees And Compensation Of Directors.**

Unless otherwise restricted by the certificate of incorporation or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. No such compensation shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

3.12 **Approval of Loans to Officers.**

The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiary, including any officer or employee who is a director of the corporation or its subsidiary, whenever, in the judgment of the directors, such loan, guaranty or assistance may reasonably be expected to benefit the corporation. The loan, guaranty or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in this section shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

3.13 **Removal Of Directors.**

Unless otherwise restricted by statute, by the certificate of incorporation or by these Bylaws, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors; provided, however, that if the stockholders of the corporation are entitled to cumulative voting, if less than the entire Board of Directors is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire Board of Directors.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director’s term of office.

3.14 **Chairman Of The Board Of Directors.**

The corporation may also have, at the discretion of the Board of Directors, a chairman of the Board of Directors who shall not be considered an officer of the corporation.

ARTICLE IV

COMMITTEES

4.1 **Committees Of Directors.**

The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board may designate 1 or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors, or in these Bylaws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the General Corporate Law of Delaware to be submitted to stockholders for approval or (ii) adopting, amending or repealing any Bylaw of the corporation.

4.2 **Committee Minutes.**

Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

4.3 **Meetings And Action Of Committees.**

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Section 3.5 (place of meetings and meetings by telephone), Section 3.6 (regular meetings), Section 3.7 (special meetings and notice), Section 3.8 (quorum), Section 3.9 (waiver of notice), and Section 3.10 (action without a meeting) of these Bylaws, with such changes in the context of such provisions as are necessary to substitute the committee and its members for the Board of Directors and its members; provided, however, that the time of regular meetings of committees may be determined either by resolution of the Board of Directors or by resolution of the committee, that special meetings of committees may also be called by resolution of the Board of Directors and that notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The Board of Directors may adopt rules for the government of any committee not inconsistent with the provisions of these Bylaws.

ARTICLE V

OFFICERS

5.1 **Officers.**

The officers of the corporation shall be a chief executive officer, a president, a secretary, and a chief financial officer. The corporation may also have, at the discretion of the Board of Directors, a chief executive officer, one or more vice presidents, one or more assistant secretaries, one or more assistant treasurers, and any such other officers as may be appointed in accordance with the provisions of Section 5.3 of these Bylaws. Any number of offices may be held by the same person.

5.2 **Appointment Of Officers.**

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Sections 5.3 or 5.5 of these Bylaws, shall be appointed by the Board of Directors, subject to the rights, if any, of an officer under any contract of employment.

5.3 **Subordinate Officers.**

The Board of Directors may appoint, or empower the chief executive officer or the president to appoint, such other officers and agents as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board of Directors may from time to time determine.

5.4 **Removal And Resignation Of Officers.**

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board of Directors at any regular or special meeting of the board or, except in the case of an officer chosen by the Board of Directors, by any officer upon whom the power of removal is conferred by the Board of Directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 **Vacancies In Offices.**

Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

5.6 **Chief Executive Officer.**

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board, if any, the chief executive officer of the corporation (if such an officer is appointed) shall, subject to the control of the Board of Directors, have general supervision, direction, and control of the business and the officers of the corporation. He or she shall preside at all meetings of the stockholders and, in the absence or nonexistence of a chairman of the board, at all meetings of the Board of Directors and shall have the general powers and duties of management usually vested in the office of chief executive officer of a corporation and shall have such other powers and duties as may be prescribed by the Board of Directors or these bylaws.

5.7 **President.**

Subject to such supervisory powers, if any, as may be given by the Board of Directors to the chairman of the board (if any) or the chief executive officer, the president shall have the general powers and duties of management usually vested in the office of president of a corporation and such other powers and duties as may be prescribed by the Board of Directors or these Bylaws.

5.8 **Vice Presidents.**

In the absence or disability of the chief executive officer and president, the vice presidents, if any, in order of their rank as fixed by the Board of Directors or, if not ranked, a vice president designated by the Board of Directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the Board of Directors, these Bylaws, the president or the chairman of the board.

5.9 **Secretary.**

The secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the Board of Directors may direct, a book of minutes of all meetings and actions of directors, committees of directors, and stockholders. The minutes shall show the time and place of each meeting, the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the Board of Directors, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the Board of Directors required to be given by law or by these Bylaws. He

or she shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the Board of Directors or by these Bylaws.

5.10 **Chief Financial Officer.**

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital retained earnings, and shares. The books of account shall at all reasonable times be open to inspection by any director.

The chief financial officer shall deposit all moneys and other valuables in the name and to the credit of the corporation with such depositories as may be designated by the Board of Directors. He or she shall disburse the funds of the corporation as may be ordered by the Board of Directors, shall render to the president, the chief executive officer, or the directors, upon request, an account of all his or her transactions as chief financial officer and of the financial condition of the corporation, and shall have other powers and perform such other duties as may be prescribed by the Board of Directors or the bylaws.

5.11 **Representation Of Shares Of Other Corporations.**

The chairman of the board, the chief executive officer, the president, any vice president, the chief financial officer, the secretary or assistant secretary of the corporation, or any other person authorized by the Board of Directors or the chief executive officer or the president or a vice president, is authorized to vote, represent, and exercise on behalf of the corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of the corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by the person having such authority.

5.12 **Authority And Duties Of Officers.**

In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the Board of Directors or the stockholders.

ARTICLE VI

INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES, AND OTHER AGENTS

6.1 **Indemnification Of Directors And Officers.**

The corporation shall, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, indemnify each of its directors and officers against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually

and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.1, a "director" or "officer" of the corporation includes any person (a) who is or was a director or officer of the corporation, (b) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.2 **Indemnification Of Others.**

The corporation shall have the power, to the maximum extent and in the manner permitted by the General Corporation Law of Delaware, to indemnify each of its employees and agents (other than directors and officers) against expenses (including attorneys' fees), judgments, fines, settlements and other amounts actually and reasonably incurred in connection with any proceeding, arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Section 6.2, an "employee" or "agent" of the corporation (other than a director or officer) includes any person (a) who is or was an employee or agent of the corporation, (b) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (c) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

6.3 **Payment Of Expenses In Advance.**

Expenses incurred in defending any action or proceeding for which indemnification is required pursuant to Section 6.1 or for which indemnification is permitted pursuant to Section 6.2 following authorization thereof by the Board of Directors shall be paid by the corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that the indemnified party is not entitled to be indemnified as authorized in this Article VI.

6.4 **Indemnity Not Exclusive.**

The indemnification provided by this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, to the extent that such additional rights to indemnification are authorized in the certificate of incorporation

6.5 **Insurance.**

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in any such capacity, or arising out of his or her status as such,

whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of the General Corporation Law of Delaware.

6.6 **Conflicts.**

No indemnification or advance shall be made under this Article VI, except where such indemnification or advance is mandated by law or the order, judgment or decree of any court of competent jurisdiction, in any circumstance where it appears:

(a) That it would be inconsistent with a provision of the certificate of incorporation, these Bylaws, a resolution of the stockholders or an agreement in effect at the time of the accrual of the alleged cause of the action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(b) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

ARTICLE VII

RECORDS AND REPORTS

7.1 **Maintenance And Inspection Of Records.**

The corporation shall, either at its principal executive offices or at such place or places as designated by the Board of Directors, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these Bylaws as amended to date, accounting books, and other records.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

A complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order for each class of stock and showing the address of each such stockholder and the number of shares registered in each such stockholder's name, shall be open to the examination of any such stockholder for a period of at least ten (10) days prior to the meeting in the manner provided by law. The stock list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law. This list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

7.2 **Inspection By Directors.**

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

ARTICLE VIII
GENERAL MATTERS

8.1 **Checks.**

From time to time, the Board of Directors shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.2 **Execution Of Corporate Contracts And Instruments.**

The Board of Directors, except as otherwise provided in these Bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

8.3 **Stock Certificates; Partly Paid Shares.**

The shares of the corporation shall be represented by certificates, provided that the Board of Directors of the corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Notwithstanding the adoption of such a resolution by the Board of Directors, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the chairman or vice-chairman of the Board of Directors, or the president or vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.4 **Special Designation On Certificates.**

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the General Corporation Law of Delaware, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

8.5 **Lost Certificates.**

Except as provided in this Section 8.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or the owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

8.6 **Construction; Definitions.**

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the Delaware General Corporation Law shall govern the construction of these Bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term "person" includes both a corporation and a natural person.

8.7 **Dividends.**

The directors of the corporation, subject to any restrictions contained in (a) the General Corporation Law of Delaware or (b) the certificate of incorporation, may declare and

pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock.

The directors of the corporation may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

8.8 **Fiscal Year.**

The fiscal year of the corporation shall be fixed by resolution of the Board of Directors and may be changed by the Board of Directors.

8.9 **Seal.**

The corporation may adopt a corporate seal, which may be altered at pleasure, and may use the same by causing it or a facsimile thereof, to be impressed or affixed or in any other manner reproduced.

8.10 **Transfer Of Stock.**

Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

8.11 **Stock Transfer Agreements.**

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the General Corporation Law of Delaware.

8.12 **Registered Stockholders.**

The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner, shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

8.13 **Facsimile Signature.**

In addition to the provisions for use of facsimile signatures elsewhere specifically authorized in these Bylaws, facsimile signatures of any officer or officers of the Corporation may be used whenever and as authorized by the Board of Directors or a committee thereof.

ARTICLE IX

AMENDMENTS

The Bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal Bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal Bylaws.

PULMONX CORPORATION

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

This Amended and Restated Investors' Rights Agreement (the "Agreement") is made as of April 16, 2019 (the "Effective Date"), by and among Pulmonx Corporation, a Delaware corporation (the "Company"), the holders of the Company's Series A-1 Preferred Stock (the "Series A-1 Preferred Stock") set forth on Exhibit A hereto (the "Series A-1 Holders"), the holders of the Company's Series B-1 Preferred Stock (the "Series B-1 Preferred Stock") set forth on Exhibit A hereto (the "Series B-1 Holders"), the holders of the Company's Series C-1 Preferred Stock (the "Series C-1 Preferred Stock") set forth on Exhibit A hereto (the "Series C-1 Holders"), the holders of the Company's Series D-1 Preferred Stock (the "Series D-1 Preferred Stock") set forth on Exhibit A hereto (the "Series D-1 Holders"), the holders of the Company's Series E-1 Preferred Stock (the "Series E-1 Preferred Stock") set forth on Exhibit A hereto (the "Series E-1 Holders"), the holders of the Company's Series F-1 Preferred Stock (the "Series F-1 Preferred Stock") set forth on Exhibit A hereto (the "Series F-1 Holders") and the holders of the Company's Series G-1 Preferred Stock (the "Series G-1 Preferred Stock," and together with the Series A-1 Preferred Stock, the Series B-1 Preferred Stock, the Series C-1 Preferred Stock, the Series D-1 Preferred Stock, the Series E-1 Preferred Stock and the Series F-1 Preferred Stock, the "Preferred Stock") set forth on Exhibit A hereto (the "Series G-1 Holders," and together with the Series A-1 Holders, the Series B-1 Holders, the Series C-1 Holders, the Series D-1 Holders, the Series E-1 Holders and the Series F-1 Holders, the "Investors"), and Glendon E. French, Dr. Rodney Perkins and Michael A. Baker, each of whom is herein referred to as "Common Holder."

RECITALS

A. The Company, the Common Holders, the Series A-1 Holders, the Series B-1 Holders, the Series C-1 Holders, the Series D-1 Holders, the Series E-1 Holders and the Series F-1 Holders have previously entered into an Amended and Restated Investors Rights Agreement dated as of June 8, 2015 (the "Prior Rights Agreement"), pursuant to which the Company granted certain rights to the Common Holders, the Series A-1 Holders, the Series B-1 Holders, Series C-1 Holders, the Series D-1 Holders, the Series E-1 Holders and the Series F-1 Holders.

B. The Company and the Series G-1 Holders have entered into a Series G-1 Preferred Stock Purchase Agreement (the "Purchase Agreement") of even date herewith pursuant to which the Company desires to sell to the Series G-1 Holders and the Series G-1 Holders desire to purchase from the Company shares of the Series G-1 Preferred Stock. A condition to the Series G-1 Holders' obligations under the Purchase Agreement is that the Company, the Common Holders, and the Investors enter into this Agreement in order to provide the Series G-1 Holders with, among other rights, (i) certain rights to register shares of the Company's Common Stock issuable upon conversion of the Series G-1 Preferred Stock held by the Series G-1 Holders, (ii) certain rights to receive or inspect information pertaining to the Company and (iii) a right of first offer with respect to certain issuances by the Company of its

securities. The Company, the Common Holders, the Series A-1 Holders, the Series B-1 Holders, the Series C-1 Holders, the Series D-1 Holders, the Series E-1 Holders and the Series F-1 Holders each desire to induce the Series G-1 Holders to purchase shares of Series G-1 Preferred Stock pursuant to the Purchase Agreement by agreeing to the terms and conditions set forth herein.

C. The Company, the Common Holders, the Series A-1 Holders, the Series B-1 Holders, the Series C-1 Holders, the Series D-1 Holders, the Series E-1 Holders and the Series F-1 Holders each desire to amend and restate the Prior Rights Agreement to add the Series G-1 Holders as parties to this Agreement and make certain other changes.

AGREEMENT

The parties hereby agree as follows:

A. **Amendments of Prior Rights Agreement; Waiver of Right of First Offer**. Effective and contingent upon execution of this Agreement by the Company and the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, and upon closing of the transactions contemplated by the Purchase Agreement, the Prior Rights Agreement is hereby amended and restated in its entirety to read as set forth in this Agreement, and the Company, the Common Holders and the Investors hereby agree to be bound by the provisions hereof as the sole agreement of the Company, the Common Holders and the Investors with respect to registration rights of the Company's securities and certain other rights, as set forth herein. The Major Investors (as defined herein) hereby waive the Right of First Offer, including the notice requirements, set forth in the Prior Rights Agreement with respect to the issuance of Series G-1 Preferred Stock.

1. **Registration Rights**. The Company and the Investors covenant and agree as follows:

1.1 **Definitions**. For purposes of this Section 1:

(a) The term "Exchange Act" means the Securities Exchange Act of 1934, as amended, (and any successor thereto) and the rules and regulations promulgated thereunder;

(b) The term "Form S-3" means such form under the Securities Act as in effect on the date hereof or any successor form under the Securities Act that permits significant incorporation by reference of the Company's subsequent public filings under the Exchange Act;

(c) The term "Common Holders' Stock" means the shares of Common Stock issued to the Common Holders;

(d) The term "Holder" means any person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 1.12 of this Agreement;

(e) The term "Qualified IPO" has the meaning given to such term in the Restated Certificate;

(f) The terms "register ," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Securities Act, and the declaration or ordering of effectiveness of such registration statement or document;

(g) The term "Registrable Securities" means (i) the shares of Common Stock issuable or issued upon conversion of (I) the Series A-1 Preferred Stock, (II) the Series B-1 Preferred Stock (including the Series B-1 Preferred Stock issuable or issued upon exercise of the warrants to purchase Series B-1 Preferred Stock), (III) the Series C-1 Preferred Stock (including the Series C-1 Preferred Stock issuable or issued upon exercise of the warrants to purchase Series C-1 Preferred Stock), (IV) the Series D-1 Preferred Stock, (V) the Series E-1 Preferred Stock, (VI) the Series F-1 Preferred Stock and (VII) the Series G-1 Preferred Stock, in each case, other than shares for which registration rights have terminated pursuant to Section 1.15 hereof, provided, however, that for purposes of Section 1.2, the shares of Common Stock issuable or issued upon conversion of the Series B-1 Preferred Stock issuable to Silicon Valley Bank ("SVB") upon exercise of its warrant shall not be deemed Registrable Securities and SVB shall not be deemed a Holder; (ii) the shares of Common Holders' Stock, provided, however, that for the purposes of Section 1.2, 1.4 or 1.13, the Common Holders' Stock shall not be deemed Registrable Securities and the Common Holders shall not be deemed Holders; and (iii) any other shares of Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares listed in (i) and (ii); provided, however, that the foregoing definition shall exclude in all cases any Registrable Securities sold by a person in a transaction in which his or her rights under this Agreement are not assigned. Notwithstanding the foregoing, Common Stock or other securities shall only be treated as Registrable Securities if and so long as (A) they have not been sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, (B) they have not been sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(1) thereof so that all transfer restrictions, and restrictive legends with respect thereto, if any, are removed upon the consummation of such sale, and (C) the Holder thereof is entitled to exercise any right provided in Section 1 in accordance with Section 1.15 below;

(h) The number of shares of "Registrable Securities then outstanding" shall be determined by the number of shares of Common Stock outstanding which are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities which are, Registrable Securities;

(i) The term "Restated Certificate" means the Company's Amended and Restated Certificate of Incorporation, as amended from time to time;

(j) The term "SEC" means the Securities and Exchange Commission; and

(k) The term "Securities Act" means the Securities Act of 1933, as amended, (and any successor thereto) and the rules and regulations promulgated thereunder.

1.2 **Request for Registration**.

(a) If the Company shall receive at any time after the earlier of (i) the fifth anniversary date of this Agreement, or (ii) six months after the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction), a written request from the Holders of a majority of the Registrable Securities then outstanding that the Company file a registration statement under the Securities Act covering the registration of at least 25% of the Registrable Securities then outstanding (or a lesser percent if the anticipated aggregate offering price, net of underwriting discounts and commissions, would exceed $10,000,000), then the Company shall, within 10 days of the receipt thereof, give written notice of such request to all Holders and shall, subject to the limitations of subsection 1.2(b), use its reasonable best efforts to file as soon as practicable, and in any event within 90 days of the receipt of such request, a registration statement under the Securities Act covering all Registrable Securities which the Holders request to be registered within 20 days of the mailing of such notice by the Company.

(b) If the Holders initiating the registration request hereunder ("Initiating Holders") intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 1.2 and the Company shall include such information in the written notice referred to in subsection 1.2(a). The underwriter will be selected by a majority in interest of the Initiating Holders and shall be reasonably acceptable to the Company. In such event, the right of any Holder to include his Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in subsection 1.5(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting. Notwithstanding any other provision of this Section 1.2, if the underwriter advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities which would otherwise be underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the underwriting shall be allocated among all participating Holders thereof, including the Initiating Holders, in proportion (as nearly as practicable) to the amount of Registrable Securities of the

Company owned by each participating Holder; provided, however, that the number of shares of Registrable Securities to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting.

(c) Notwithstanding the foregoing, if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 1.2, a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its shareholders for such registration statement to be filed and it is therefore essential to defer the filing of such registration statement, the Company shall have the right to defer such filing for a period of not more than 120 days after receipt of the request of the Initiating Holders; provided, however, that the Company may not utilize this right more than once in any twelve-month period.

(d) In addition, the Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to this Section 1.2:

(i) After the Company has effected two registrations pursuant to this Section 1.2 and such registrations have been declared or ordered effective;

(ii) During the period starting with the date 90 days prior to the Company's good faith estimate of the date of filing of, and ending on a date 90 days after the effective date of, a registration subject to Section 1.3 hereof, unless such offering is the initial public offering of the Company's securities, in which case, ending on a date 180 days after the effective date of such registration subject to Section 1.3 hereof; provided that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective; or

(iii) If the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 1.4 below.

1.3 **Company Registration**. If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for shareholders other than the Holders) any of its stock under the Securities Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in a Company stock plan or a transaction covered by Rule 145 under the Securities Act, or a registration in which the only stock being registered is Common Stock issuable upon conversion of debt securities which are also being registered), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within 20 days after mailing of such notice by the Company in accordance with Section 3.5, the Company shall, subject to the provisions of Section 1.8, cause to be registered under the Securities Act all of the Registrable Securities that each such Holder has requested to be registered.

1.4 **Form S-3 Registration**. In case the Company shall receive from any Holder or Holders of not less than 25% of the Registrable Securities then outstanding, a written

request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within 15 days after receipt of such written notice from the Company; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 1.4: (i) if Form S-3 is not available for such offering by the Holders; (ii) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than $1,000,000; (iii) if the Company shall furnish to the Holders a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its shareholders for such Form S-3 Registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period of not more than 120 days after receipt of the request of the Holder or Holders under this Section 1.4; provided, however, that the Company shall not utilize this right more than once in any 12-month period; (iv) if the Company has, within the twelve (12) month period preceding the date of such request, already effected two registrations on Form S-3 for the Holders pursuant to this Section 1.4; (v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance; or (vi) during the period ending 180 days after the effective date of a registration statement subject to Section 1.3.

(c) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. Registrations effected pursuant to this Section 1.4 shall not be counted as demands for registration or registrations effected pursuant to Sections 1.2 or 1.3, respectively.

1.5 **Obligations of the Company**. Whenever required under this Section 1 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for up to 120 days or until the

distribution described in such registration statement is completed, if earlier. The Company shall not be required to file, cause to become effective or maintain the effectiveness of any registration statement that contemplates a distribution of securities on a delayed or continuous basis pursuant to Rule 415 under the Securities Act.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement for up to 120 days or until the distribution described in such registration statement is completed, if earlier; provided, however, that such 120 day period shall be extended for a period of time equal to the period a Holder refrains from selling any securities included in such registration at the request of the underwriters.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus and any issuer free writing prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its reasonable best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing, such obligation to continue for 120 days.

(g) Cause all such Registrable Securities registered pursuant hereunder to be listed on each securities exchange on which similar securities issued by the Company are then listed.

(h) Provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

(i) Use its reasonable best efforts to furnish, at the request of any Holder requesting registration of Registrable Securities pursuant to this Section 1, on the date that such Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Section 1, if such securities are being sold through underwriters, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters and (ii) a letter dated such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters.

1.6 **Furnish Information**. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 1 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required to effect the registration of such Holder's Registrable Securities. The Company shall have no obligation with respect to any registration requested pursuant to Section 1.2 or Section 1.4 of this Agreement if, as a result of the application of the preceding sentence, the number of shares or the anticipated aggregate offering price of the Registrable Securities to be included in the registration does not equal or exceed the number of shares or the anticipated aggregate offering price required to originally trigger the Company's obligation to initiate such registration as specified in subsection 1.2(a) or subsection 1.4(b)(ii), whichever is applicable.

1.7 **Expenses of Registration**.

(a) **Demand Registration**. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Section 1.2, including (without limitation) all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company, and the reasonable fees and disbursements not exceeding $35,000 of one counsel for the selling Holders selected by them with the approval of the Company, which approval shall not be unreasonably withheld, shall be borne by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 1.2 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one demand registration pursuant to Section 1.2.

(b) **Company Registration**. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications of Registrable Securities pursuant to Section 1.3 for each Holder (which right may be assigned as provided in Section 1.12), including all registration, filing, and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company and the reasonable fees and disbursements not exceeding $35,000 of one counsel for the selling Holder or Holders selected

by them with the approval of the Company, which approval shall not be unreasonably withheld, shall be borne by the Company.

(c) **Registration on Form S-3**. All expenses other than underwriting discounts and commissions incurred in connection with a registration requested pursuant to Section 1.4, including all registration, filing, qualification, printers' and accounting fees and the reasonable fees and disbursements not exceeding $35,000 of one counsel for the selling Holder or Holders selected by them with the approval of the Company, which approval shall not be unreasonably withheld, shall be borne by the Company.

1.8 **Underwriting Requirements**. In connection with any offering involving an underwriting of shares of the Company's capital stock, the Company shall not be required under Section 1.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by it (or by other persons entitled to select the underwriters), and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by shareholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters determine in their sole discretion will not jeopardize the success of the offering (the securities so included to be apportioned pro rata among the selling shareholders according to the total amount of securities entitled to be included therein owned by each selling shareholder or in such other proportions as shall mutually be agreed to by such selling shareholders) but in no event shall (i) the amount of securities of the selling Holders included in the offering be reduced below 20% of the total amount of securities included in such offering, unless such offering is the initial public offering of the Company's securities, in which case, the selling shareholders may be excluded if the underwriters make the determination described above and no other shareholder's securities are included, (ii) any securities held by a Common Holder be included if any securities held by any other selling Holder are excluded or (iii) any securities of any other shareholders be included in the offering if any securities of the Holders are excluded from the offering. For purposes of the preceding parenthetical concerning apportionment, for any selling shareholder which is a holder of Registrable Securities and which is a partnership or corporation, the partners, retired partners and shareholders of such holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "selling shareholder," and any pro-rata reduction with respect to such "selling shareholder" shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "selling shareholder," as defined in this sentence.

1.9 **Delay of Registration**. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 1.

1.10 **Indemnification**. In the event any Registrable Securities are included in a registration statement under this Section 1:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, any underwriter (as defined in the Securities Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "Violation"): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement (or incorporated by reference therein), including any preliminary prospectus, issuer free writing prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities law; and the Company will pay to each such Holder, underwriter or controlling person, as incurred, any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable to any Holder, underwriter or controlling person for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Holder, underwriter or controlling person.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Securities Act, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay, as incurred, any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this subsection 1.10(b), in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this subsection 1.10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be

unreasonably withheld; provided, that in no event shall any indemnity under this subsection 1.10(b) exceed the net proceeds from the offering received by such Holder, except in the case of willful fraud by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 1.10 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 1.10, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the reasonable fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party under this Section 1.10, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 1.10.

(d) If the indemnification provided for in this Section 1.10 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage, or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and of the indemnified party on the other in connection with the statements or omissions that resulted in such loss, liability, claim, damage or expense as well as any other relevant equitable considerations; provided, that in no event shall any contribution by a Holder under this Subsection 1.10(d) exceed the net proceeds from the offering received by such Holder, except in the case of willful fraud by such Holder. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) The obligations of the Company and Holders under this Section 1.10 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1, and otherwise.

1.11 **Reports Under the Exchange Act**. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Securities Act and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144 or any similar or analogous rule promulgated under the Securities Act, at all times after 90 days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public so long as the Company remains subject to the periodic reporting requirements under Sections 13 or 15(d) of the Exchange Act;

(b) take such action, including the voluntary registration of its Common Stock under Section 12 of the Exchange Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon as practicable after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act; and

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after 90 days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

1.12 **Assignment of Registration Rights.** The rights to cause the Company to register Registrable Securities pursuant to this Section 1 may be assigned (but only with all related obligations) by a Holder to a transferee or assignee (i) of at least 100,000 shares (or if less than 100,000 shares, all of the shares held by such Holder) of such securities (subject to adjustment for stock splits, stock dividends, reclassification or the like), (ii) that is a subsidiary, parent, partner, limited partner, retired partner, member, retired member or shareholder of a Holder, (iii) that is an affiliated fund or entity of the Holder, which means with respect to a limited liability company or a limited liability partnership, a fund or entity managed by the same manager or managing member or

general partner or management company or by an entity controlling, controlled by, or under common control with such manager or managing member or general partner or management company (such a fund or entity, an "Affiliated Fund"), (iv) who is a Holder's child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (such a relation, a Holder's "Immediate Family Member", which term shall include adoptive relationships), (v) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member or (vi) that is an affiliate of the Holder, provided the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; and provided, further, that such assignment shall be effective only if the transferee agrees to be bound by this Agreement and immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Securities Act. For the purposes of determining the number of shares of Registrable Securities held by a transferee or assignee, the holdings of transferees and assignees of (x) a partnership who are partners or retired partners of such partnership, or (y) a limited liability company who are members or retired members of such limited liability company (including Immediate Family Members of such partners or members who acquire Registrable Securities by gift, will or intestate succession) shall be aggregated together and with the partnership or limited liability company; provided that all assignees and transferees who would not qualify individually for assignment of registration rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices or taking any action under Section 1.

1.13 **Limitations on Subsequent Registration Rights**. From and after the date of this Agreement, the Company shall not, without the prior written consent of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, enter into any agreement with any holder or prospective holder of any securities of the Company which would allow such holder or prospective holder (a) to include such securities in any registration filed under Section 1.2 hereof, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of his securities will not reduce the amount of the Registrable Securities of the Holders which is included, (b) to make a demand registration which could result in such registration statement being declared effective prior to the earlier of either of the dates set forth in subsection 1.2(a) or within 120 days of the effective date of any registration effected pursuant to Section 1.2 or (c) not to be bound by the obligations of the Holders set forth in the reimbursement provision of Section 1.7(a) and Sections 1.8, 1.10 or 1.14.

1.14 **Lock-Up Agreement**.

(a) **Lock-Up Period; Agreement**. Subject to Section 1.14(b), in connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing such offering of the Company's securities, each Holder agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company, however or whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed 180 days plus up to an additional 18 days to the extent requested by such managing underwriter in order to address Rule

2241 of the Financial Industry Regulatory Authority, Inc. or NYSE Rule 472(f)(4) or any similar successor provisions) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the Company's initial public offering. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Company stockholders that are subject to such agreements, based on the number of shares subject to such agreements.

(b) **Limitations**. The obligations described in Section 1.14(a) shall apply only if all officers and directors of the Company and all one-percent securityholders of the Company enter into similar agreements, and shall not apply to a registration relating solely to employee benefit plans, or to a registration relating solely to a transaction pursuant to Rule 145 under the Securities Act.

(c) **Stop-Transfer Instructions**. In order to enforce the foregoing covenants, the Company may impose stop-transfer instructions with respect to the securities of each Holder (and the securities of every other person subject to the restrictions in Section 1.14(a)).

(d) **Transferees Bound**. Each Holder agrees that prior to the Company's initial public offering it will not transfer securities of the Company unless each transferee agrees in writing to be bound by all of the provisions of this Section 1.14.

1.15 **Termination of Registration Rights**. No Holder shall be entitled to exercise any right provided for in this Section 1 after the earlier of (i) three years following the consummation of a Qualified IPO, (ii) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares during a three-month period without registration, or (iii) upon termination of the Agreement, as provided in Section 3.1.

2. **Covenants of the Company**.

2.1 **Delivery of Financial Statements**. The Company shall deliver to each person (other than a person reasonably deemed by the Company to be a competitor of the Company, provided that in no event shall Boston Scientific Corporation ("BSC") and any of its affiliates, or RTW Master Fund, Ltd. or RTW Innovation Master Fund, Ltd. (together, the "RTW Funds") or any of their respective affiliates, be deemed to be a competitor of the Company) who holds at least 4,000,000 shares of Preferred Stock or the Common Stock issued upon conversion thereof (subject to adjustment for stock splits, stock dividends, reclassifications or the like):

(a) as soon as practicable, but in any event within 90 days after the end of each fiscal year of the Company, an income statement for such fiscal year, a balance sheet of the Company and statement of shareholder's equity as of the end of such year, and a statement of cash flows for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP"), and audited and certified

by an independent public accounting firm of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Company, an unaudited income statement for such fiscal quarter, a statement of cash flows for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter;

(c) within thirty (30) days of the end of each month, an unaudited income statement and a statement of cash flows and balance sheet for and as of the end of such month, in reasonable detail; and

(d) as soon as practicable, but in any event at least thirty (30) days prior to the end of each fiscal year, a budget and business plan for the new fiscal year, prepared on a monthly basis, and, as soon as prepared, any other budgets or revised budgets prepared by the Company.

2.2 **Inspection**. The Company shall permit each Major Investor (as such term is defined in Section 2.4) (except for a Major Investor reasonably deemed by the Company to be a competitor of the Company, provided that in no event shall BSC and any of its affiliates, or the RTW Funds or any of their respective affiliates, be deemed to be a competitor of the Company), at such Holder's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Investor; provided, however, that the Company shall not be obligated pursuant to this Section 2.2 to provide access to any information to the extent that the Board of Directors determines in good faith that withholding such information is required (a) to preserve the attorney-client privilege between the Company and its legal counsel, (b) to protect disclosure of trade secrets under circumstances that might jeopardize the Company's ability to claim or take advantage of any trade secret protection law or other similar protection, (c) to avoid disclosure of competitively sensitive information to a competitor of the Company; provided that in no event shall BSC and any of its affiliates be deemed to be a competitor of the Company, (d) to avoid a violation of any law or the fiduciary duties of the Board of Directors, (e) to avoid disclosure of information that represents a potential or actual conflict between the interests of the Company and the interests of BSC or (f) to preserve the confidentiality of personnel matters.

2.3 **Board Observer**.

(a) So long as BSC continues to own at least 15,151,515 shares of Series F-1 Preferred (as adjusted for any stock dividend, stock split, combination of shares, reorganization, recapitalization, reclassification or other similar event), then (i) one (1) representative of BSC (the "BSC Board Observer") shall be permitted to attend each meeting of the Board of Directors in a nonvoting observer capacity and to participate in all discussions during each such meeting, (ii) the Company shall send to the BSC Board Observer the notice of the time and place of any such meeting in the same manner and at the same time as it shall send such notice to its directors and (iii) the Company shall also provide to the BSC Board Observer

copies of all notices, reports, minutes, consents and other materials and information given to the members of the Board of Directors in connection with any such meeting at the same time and in the same manner as they are provided to the members of the Board of Directors; provided, however, that the BSC Board Observer shall not be entitled to receive any notices, reports, minutes, consents or other materials or information, or be in attendance for any meeting (or any portion thereof) of the Board of Directors if the Board of Directors determines in good faith that withholding such information is required (a) to preserve the attorney-client privilege between the Company and its legal counsel, (b) to protect disclosure of trade secrets under circumstances that might jeopardize the Company's ability to claim or take advantage of any trade secret protection law or other similar protection, (c) to avoid a violation of any law or the fiduciary duties of the Board of Directors or (d) to avoid disclosure of information that represents a potential or actual conflict between the interests of the Company and the interests of BSC.

(b) So long as Kaiser Permanente Ventures LLC - Series A, Kaiser Permanente Ventures LLC - Series B, The Permanente Federation LLC – Series I and The Permanente Federation LLC – Series J (together, the "Kaiser Funds") continue to own at least 1,725,608 shares of Preferred Stock (as adjusted for any stock dividend, stock split, combination of shares, reorganization, recapitalization, reclassification or other similar event), then (i) one (1) representative of the Kaiser Funds (the "Kaiser Board Observer") shall be permitted to attend each meeting of the Board of Directors in a nonvoting observer capacity and to participate in all discussions during each such meeting, (ii) the Company shall send to the Kaiser Board Observer the notice of the time and place of any such meeting in the same manner and at the same time as it shall send such notice to its directors and (iii) the Company shall also provide to the Kaiser Board Observer copies of all notices, reports, minutes, consents and other materials and information given to the members of the Board of Directors in connection with any such meeting at the same time and in the same manner as they are provided to the members of the Board of Directors; provided, however, that the Kaiser Board Observer shall not be entitled to receive any notices, reports, minutes, consents or other materials or information, or be in attendance for any meeting (or any portion thereof) of the Board of Directors if the Board of Directors determines in good faith that withholding such information is required (a) to preserve the attorney-client privilege between the Company and its legal counsel, (b) to protect disclosure of trade secrets under circumstances that might jeopardize the Company's ability to claim or take advantage of any trade secret protection law or other similar protection, (c) to avoid a violation of any law or the fiduciary duties of the Board of Directors or (d) to avoid disclosure of information that represents a potential or actual conflict between the interests of the Company and the interests of the Kaiser Funds.

(c) So long as Shea Ventures Opportunity Fund II, LP, Shea Ventures LLC, and Survivor's Trust U/A Eighth – E&M Shea Revocable Trust (together, the "Shea Funds") continue to own at least 1,334,736 shares of Preferred Stock (as adjusted for any stock dividend, stock split, combination of shares, reorganization, recapitalization, reclassification or other similar event), then (i) one (1) representative of the Shea Funds (the "Shea Board Observer") shall be permitted to attend each meeting of the Board of Directors in a nonvoting observer capacity and to participate in all discussions during each such meeting, (ii) the Company shall send to the Shea Board Observer the notice of the time and place of any such

meeting in the same manner and at the same time as it shall send such notice to its directors and (iii) the Company shall also provide to the Shea Board Observer copies of all notices, reports, minutes, consents and other materials and information given to the members of the Board of Directors in connection with any such meeting at the same time and in the same manner as they are provided to the members of the Board of Directors; provided, however, that the Shea Board Observer shall not be entitled to receive any notices, reports, minutes, consents or other materials or information, or be in attendance for any meeting (or any portion thereof) of the Board of Directors if the Board of Directors determines in good faith that withholding such information is required (a) to preserve the attorney-client privilege between the Company and its legal counsel, (b) to protect disclosure of trade secrets under circumstances that might jeopardize the Company's ability to claim or take advantage of any trade secret protection law or other similar protection, (c) to avoid a violation of any law or the fiduciary duties of the Board of Directors or (d) to avoid disclosure of information that represents a potential or actual conflict between the interests of the Company and the interests of the Shea Funds.

2.4 **Right of First Offer**.

(a) The Company hereby grants to ABG-Pulmonx Limited ("ABG") a primary right of first offer with respect to future sales by the Company of its Shares (as hereinafter defined) of up to 50% of the Shares offered at such future sale (the "ABG Pro Rata") until ABG has purchased $50,000,000 in aggregate of equity securities of the Company, whether pursuant to the ABG Pro Rata or otherwise, and which shall include the Stock (as defined in Purchase Agreement) purchased by ABG pursuant to the Purchase Agreement (the "ABG Limit") in accordance with the provisions of Section 2.4(a)(i) and (ii).

(i) The Company shall deliver a notice (the "ABG RFO Notice") to ABG stating (i) its bona fide intention to offer such Shares, (ii) the price and terms, if any, upon which it proposes to offer such Shares and (iii) the maximum number of Shares that ABG may purchase under its ABG Pro Rata (the "ABG Maximum Shares").

(ii) Within 10 business days after delivery of the ABG RFO Notice (the "ABG Pro Rata Period"), ABG may elect to purchase or obtain, at the price and on the terms specified in the ABG RFO Notice, up to the ABG Maximum Shares.

(b) Subject to the terms and conditions specified in this Section 2.4, and after the ABG Pro Rata Period, the Company hereby grants to each Major Investor (as hereinafter defined) a secondary right of first offer with respect to future sales by the Company of its Shares. For purposes of this Section 2.4, a "Major Investor" shall mean any person who holds at least 500,000 shares of Preferred Stock or the Common Stock issued upon conversion thereof (subject to adjustment for stock splits, stock dividends, reclassifications or the like). For purposes of this Section 2.4, the definition of Major Investor includes any general partners, managing members or affiliates of a Major Investor, including affiliated funds. A Major Investor who chooses to exercise the right of first offer may designate as purchasers under such right itself or its partners or affiliates, including affiliated funds, in such proportions as it deems appropriate.

Each time the Company proposes to offer any shares of, or securities convertible into or exercisable for any shares of, any class of its capital stock ("Shares"), the Company shall first make an offering of such Shares to ABG until it has reached the ABG Limit in accordance with Section 2.4(a) and then to each Major Investor in accordance with the following provisions:

(c) The Company shall deliver a notice (the "RFO Notice") to the Major Investors stating (i) its bona fide intention to offer such Shares, (ii) the number of such Shares to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such Shares, excluding any Shares that may be sold pursuant to Section 2.4(a).

(d) Within 10 business days after delivery of the RFO Notice, the Major Investor may elect to purchase or obtain, at the price and on the terms specified in the RFO Notice, up to that portion of such Shares which equals the proportion that the number of shares of Common Stock issued and held, or issuable upon conversion of all convertible securities then held, by such Major Investor bears to the total number of shares of Common Stock then outstanding (assuming full conversion and exercise of all outstanding convertible or exercisable securities). The Company shall promptly, in writing, inform ABG of any other Major Investor's failure to elect to purchase all the shares available to it. During the 10-business-day period commencing after receipt of such information, ABG shall be entitled to elect to purchase or obtain that portion of the Shares for which all Major Investors were entitled to subscribe but which were not subscribed for by the Major Investors up to the ABG Limit (the "ABG Under-Subscription Right"). Following such 10-day-business period in the preceding sentence, the Company shall promptly, in writing, inform each Major Investor (other than ABG) that elects to purchase all the shares available to it (each, a "Fully-Exercising Investor") of any other Major Investor's failure to do likewise. During the subsequent 10-day-business period after receipt of such information, each Fully-Exercising Investor shall be entitled to elect to purchase or obtain the remaining portion of the Shares (after taking into account any Shares purchased by ABG under this Section 2.4(d)) for which all Major Investors were entitled to subscribe but which were not subscribed for by the Major Investors that is equal to the proportion that the number of shares of Common Stock issued and held, or issuable upon conversion of all convertible securities then held, by such Fully-Exercising Investor bears to the total number of shares of Common Stock (assuming full conversion of all outstanding convertible securities then outstanding) held by all Fully Exercising Investors. In the event that ABG does not purchase all of ABG's pro rata amount of the Shares allocated to ABG under the ABG Pro Rata and ABG Under-Subscription Right up to the ABG Limit, then the rights afforded to ABG under the ABG Pro Rata and the ABG Under-Subscription Right shall terminate; provided however, that ABG shall be able to participate in any rights of first offer that are generally afforded to the Major Investors.

(e) The Company may, during the 45 calendar day period following the expiration of the period provided in subsection 2.4(d) hereof, offer the remaining unsubscribed portion of the Shares to any persons or entities at a price not less than, and upon terms no more favorable to the offeree than those specified in the RFO Notice. No Major Investor that has elected to purchase or otherwise obtain any such Shares pursuant to the exercise of the right of first offer set forth in this Section 2.4 shall be obligated to consummate such

purchase or acquisition unless and until such Shares available for issuance or sale to such persons or entities have actually been issued or sold in accordance with the terms set forth in the RFO Notice, in which event a closing with respect to both the purchase by such Major Investors and such persons or entities shall occur simultaneously. If the Company does not enter into an agreement for the sale of the Shares within such period, or if such agreement is not consummated within 60 calendar days of the execution thereof, the right provided hereunder shall be deemed to be revived and such Shares shall not be offered unless first reoffered to the Major Investors in accordance herewith.

(f) The right of first offer in this Section 2.4 shall not be applicable to, and the definition of "Shares" shall not include any securities issued as a result of, (i) the issuance of securities in connection with stock dividends, stock splits or similar transactions; (ii) the issuance or sale of Common Stock (or options therefor) to employees, consultants and directors of the Company, directly or pursuant to a stock option plan, restricted stock plan or other similar plan or agreement, which issuance and plan or agreement are approved by the Board of Directors; (iii) the issuance of capital stock, or options or warrants to purchase capital stock, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings, commercial property lease transactions or similar transactions, the terms of which issuances and transactions are approved by the Board of Directors; (iv) the issuance of securities in connection with bona fide acquisitions of other corporations or entities pursuant to a merger, consolidation, purchase of assets, reorganization or similar transactions in which the Company acquires all or substantially all of the assets of such corporation or entity or 50% or more of the equity ownership in such corporation or entity, the terms of which issuance and transaction are approved by the Board of Directors; (v) the issuance of Common Stock issuable upon conversion of the Preferred Stock; (vi) the consummation of a Qualified IPO; (vii) the issuance of securities to an entity as a component of any corporate strategic relationship with such entity primarily for the purpose of (A) joint venture, technology licensing or development activities, (B) distribution, supply or manufacture of the Company's products or services or (C) any other arrangements involving corporate partners that are primarily for purposes other than raising capital, the terms of which issuance to and business relationship with such entity are approved by the Board of Directors; (viii) the issuance of shares of Common Stock or Preferred Stock issued or issuable upon exercise of warrants or options outstanding as of the Effective Date; (ix) the issuance of shares of Common Stock issued or issuable in connection with any transaction where the securities so issued are excepted from the definition "Shares" as it pertains to the rights of first offer pursuant to this Section 2.4 by (Y) the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class, and (Z) a majority of the Preferred Directors (as such term is defined in the Restated Certificate); and (x) the issuance of shares of Series G-1 Preferred Stock pursuant to the Purchase Agreement. In addition to the foregoing, the right of first offer in this Section 2.4 shall not be applicable with respect to any Major Investor and any subsequent securities issuance, if (i) at the time of such subsequent securities issuance, the Major Investor is not an "accredited investor," as that term is then defined in Rule 501(a) under the Securities Act, and (ii) such subsequent securities issuance is otherwise being offered only to accredited investors.

(g) The right of first offer of each Major Investor under this Section 2.4 may be assigned to the same parties, subject to the same restrictions, as any assignment of registration rights pursuant to Section 1.12.

2.5 **Director and Officer Liability Insurance**. The Company will maintain director and officer liability insurance with levels of coverage of at least $1 million and otherwise as deemed customary and appropriate by the Company's Board of Directors.

2.6 **Qualified Small Business Stock Status**. In the event that the Company proposes to take an action or engage in a transaction that would reasonably be expected to result in the Preferred Stock no longer being "qualified small business stock" within the meaning of Section 1202(c) of the Internal Revenue Code of 1986, as amended (the "Code"), the Company shall notify the Investors and consult in good faith to devise a mutually agreeable and reasonable alternative course of action or transaction structure that would preserve such status.

2.7 **Confidential Information and Invention Agreement**. The Company shall require all employees and consultants to execute and deliver a Confidential Information and Invention Agreement substantially in a form approved by the Company's counsel or Board of Directors.

2.8 **Affiliate Transactions.** The Company shall not, directly or indirectly, engage in any transaction with any officer, director, employee, stockholder or affiliate of the Company (other than transactions relating to existing agreements with such person) unless approved by the Board of Directors, not including the vote of any interested director.

2.9 **Directors' Expenses.** The reasonable out-of-pocket and travel expenses of any non-employee directors that are incurred in attending Board meetings (or meetings of committees thereof) or in connection with the performance of their duties as directors shall be paid or reimbursed promptly by the Company. Such expenses shall likewise be reimbursed when incurred by (i) the non-voting representative selected by HealthCap V L.P. ("HealthCap") pursuant to paragraph 3 of the Management Rights Letter dated as of February 9, 2010, in attending Board meetings not attended by the director designated by HealthCap pursuant to Section 1.1(e) of the Amended and Restated Voting Agreement dated as of the date hereof (the "A&R Voting Agreement") and (ii) the BSC Board Observer selected by BSC, the Kaiser Board Observer selected by the Kaiser Funds and the Shea Board Observer selected by the Shea Funds pursuant to Section 2.3 of this Agreement, in attending Board meetings. The Board of Directors will establish a budget for out-of-pocket and travel expenses, with the understanding that only those expenses incurred up to the established budget will be reimbursed by the Company pursuant to this Section 2.10.

2.10 **Termination of Covenants**.

(a) The covenants set forth in Sections 2.1 through Section 2.9 shall terminate as to each Holder and be of no further force or effect (i) immediately prior to the consummation of an initial public offering, and (ii) upon termination of the Agreement, as provided in Section 3.1.

(b) The covenants set forth in Sections 2.1 and 2.2 shall terminate as to each Holder and be of no further force or effect when the Company first becomes subject to the periodic reporting requirements of Sections 13 or 15(d) of the Exchange Act, if this occurs earlier than the events described in Section 2.11(a) above.

3. **Miscellaneous**.

3.1 **Termination**. This Agreement shall terminate, and have no further force and effect, upon the consummation of a transaction or series of related transactions deemed to be a Liquidation Transaction (as such term is defined in the Restated Certificate) in connection with which the shareholders of the Company receive cash and/or unrestricted securities that are actively traded on a national securities exchange and are of an entity subject to and in compliance with the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act.

3.2 **Entire Agreement**. This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof, and any and all other written or oral agreements relating to the subject matter hereof existing between the parties hereto are expressly canceled, including the Prior Rights Agreement.

3.3 **Successors and Assigns**. Except as otherwise provided in this Agreement, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the parties (including transferees of any of the Preferred Stock or any Common Stock issued upon conversion thereof). Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

3.4 **Amendments and Waivers**. Any term of this Agreement may be amended or waived only with the written consent of (i) the Company and (ii) the holders of at least a majority of the then outstanding shares of Preferred Stock, voting together as a single class; provided, that if such amendment or waiver has the effect of affecting the Common Holders' Stock (i) in a manner different than securities issued to the Investors and (ii) in a manner adverse to the interests of the holders of the Common Holders' Stock, then such amendment shall require the consent of the holder or holders of a majority of the Common Holders' Stock then providing services to the Company as officers, employees or consultants; provided further, that no such amendment or waiver shall adversely affect any Investor in a different or disproportionate manner relative to the other Investors of the same class or series unless such amendment or waiver is agreed to in writing by such adversely and differently/disproportionately affected Investor; provided further, that no such amendment or waiver shall adversely affect any Major Investor in a different or disproportionate manner relative to the other Major Investors unless such amendment or waiver is agreed to in writing by such adversely and differently/disproportionately affected Major Investor; and provided further, that the Company shall provide prior written notice to BSC of any amendment or waiver of this Agreement at the same time the Company seeks any other Investor's consent for such amendment or waiver. Without limiting the generality of the foregoing proviso, if such

amendment or waiver materially and adversely affects the rights of BSC as set forth in Sections 2.1, 2.2, 2.3, 2.5 and 2.10, the rights of the RTW Funds as set forth in Section 2.1 or 2.2, the rights of the Kaiser Funds in Section 2.3, or the rights of the Shea Funds in Section 2.3, in a manner different or disproportionate relative to the other Investors or amends or waives this sentence, such amendment or waiver will require the separate written approval of BSC, the Kaiser Funds, the Shea Funds or the RTW Funds, as applicable. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each party to the Agreement, whether or not such party has signed such amendment or waiver, each future holder of all such Registrable Securities, and the Company.

3.5 **Notices**. Unless otherwise provided, any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient upon delivery, when delivered personally or by overnight courier or sent by facsimile or other form of electronic transmission (upon customary confirmation of receipt), or 48 hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth on Exhibit A hereto or as subsequently modified by written notice complying with this Section 3.5.

3.6 **Severability**. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Agreement, (b) the balance of the Agreement shall be interpreted as if such provision were so excluded and (c) the balance of the Agreement shall be enforceable in accordance with its terms.

3.7 **Governing Law**. This Agreement and all acts and transactions pursuant hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of laws.

3.8 **Counterparts**. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

3.9 **Titles and Subtitles**. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

3.10 **Aggregation of Stock**. All shares of the Preferred Stock held or acquired by affiliated entities or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

[Signature Pages Follow.]

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

COMPANY:

PULMONX CORPORATION

By: /s/ Glendon E. French
Name: Glendon E. French
Title: Chief Executive Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

COMMON HOLDER:

By: /s/ Glendon E. French

Name: Glendon E. French

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

COMMON HOLDERS:

By: /s/ Rodney Perkins
Name: Rodney C. Perkins, M.D.

RODNEY C. PERKINS, AS TRUSTEE OF THE PERKINS FAMILY REVOCABLE TRUST, DATED FEBRUARY 28, 1986

By: /s/ Rodney Perkins
Name: Rodney C. Perkins, M.D.
Title: Trustee

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

ABG-PULMONX LIMITED

By:	/s/ Andrew Pang
Name:	Andrew Pang
Title:	Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

ABG YY LIMITED

By:	/s/ HAO Xiaohui
Name:	HAO Xiaohui
Title:	Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

RTW MASTER FUND, LTD.

By:	/s/ Roderick Wong
Name:	Roderick Wong, M.D.
Title:	Director

RTW INNOVATION MASTER FUND, LTD.

By:	/s/ Roderick Wong
Name:	Roderick Wong, M.D.
Title:	Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

MERIDIAN SMALL CAP GROWTH FUND

By: its Investment Adviser
ArrowMark Colorado Holdings, LLC

By: /s/ David Corkins
Name: David Corkins
Title: Managing Member

ARROWMARK LIFE SCIENCE FUND, LP

By: its General Partner
AMP Life Science GP, LLC

By: /s/ David Corkins
Name: David Corkins
Title: Managing Member

ARROWMARK FUNDAMENTAL OPPORTUNITY FUND L.P.

By: its General Partner
ArrowMark Partners GP, LLC

By: /s/ David Corkins
Name: David Corkins
Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTORS:

LVP LIFE SCIENCE VENTURES III, L.P.

By: LVP GP III, LLC
Its: General Partner

By: /s/ Patrick F. Latterell
Name: Patrick F. Latterell
Title: Managing Member

LVP III ASSOCIATES, L.P.

By: LVP GP III, LLC
Its: General Partner

By: /s/ Patrick F. Latterell
Name: Patrick F. Latterell
Title: Managing Member

LVP III PARTNERS, L.P.

By: LVP GP III, LLC
Its: General Partner

By: /s/ Patrick F. Latterell
Name: Patrick F. Latterell
Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTORS:

KAISER PERMANENTE VENTURES LLC – SERIES A

By: /s/ Thomas Meier
Name: Thomas Meier
Title: SVP & Treasurer

THE PERMANENTE FEDERATION LLC – SERIES I

By: /s/ Pauline Fox
Name: Pauline Fox
Title: EVP & CLO

THE PERMANENTE FEDERATION LLC – SERIES J

By: /s/ Pauline Fox
Name: Pauline Fox
Title: EVP & CLO

KAISER PERMANENTE VENTURES LLC – SERIES B

By: /s/ Thomas Meier
Name: Thomas Meier
Title: Member, Management Committee

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

SHEA VENTURES OPPORTUNITY FUND II, LP

By: SVO GP II, LLC
Its: General Partner

By: /s/ Jason Schoettler
Name:
Title:

SHEA VENTURES LLC

By: /s/ John Morrissey
Name: John Morrissey
Title: Managing Director

SURVIVOR'S TRUST U/A EIGHTH- E&M SHEA REVOCABLE TRUST

By: /s/ John Morrissey
Name: John Morrissey
Title: Trustee

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTORS:

MONTREUX EQUITY PARTNERS II SBIC, L.P.

By: Montreux Equity Management II, LLC
Its: General Partner

By: /s/ Daniel K. Turner III
Name: Daniel K. Turner III
Title: Managing Member

MONTREUX EQUITY PARTNERS III SBIC, L.P.

By: Montreux Equity Management III, LLC
Its: General Partner

By: /s/ Daniel K. Turner III
Name: Daniel K. Turner III
Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

DE NOVO VENTURES III LIQUIDATING TRUST

By:	/s/ Richard Ferrari
Name:	Richard Ferrari
Title:	Managing Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

HEALTHCAP V L.P.

By: HealthCap V GP SA
Its: General Partner

By:	/s/ Dag Richter	/s/ Fabrice Bernhard
Name:	Dag Richter	Fabrice Bernhard
Title:	Director	General Manager

OFP V ADVISOR AB, as a member and on behalf of all members, if any, of OFCO ClubV

By:	/s/ Staffan Lindstrand
Name:	Staffan Lindstrand
Title:	Partner

By:	/s/ Per Samuelsson
Name:	Per Samuelsson
Title:	Partner

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

KPCB HOLDINGS, INC.,
as nominee

By:	/s/ Jason Doren
Name:	Jason Doren
Title:	President

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first above written.

INVESTOR:

BOSTON SCIENTIFIC CORPORATION

By:	/s/ Art Butcher
Name:	Art Butcher
Title:	SVP & President

The parties have executed this Amended and Restated Investors' Rights Agreement as of April 25, 2019.

INVESTOR:

MONTREUX GROWTH PARTNERS II, L.P.

By: Montreux Growth Management II, LLC
Its: General Partner

By: /s/ Daniel K. Turner III
Name: Daniel K. Turner III
Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of April 25, 2019.

INVESTOR:

ASHLAND UNIVERSITY

By:	/s/ Marc P. Pasteris
Name:	Marc P. Pasteris
Title:	Vice President and Chief Financial Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of April 25, 2019.

INVESTOR:

DRIEHAUS LIFE SCIENCES FUND, L.P.

By: /s/ Janet McWilliams

Name: Janet McWilliams

Title: Senior Vice President of Driehaus Capital Management (USVI) LLC, General Partner

Exhibit A

Series A-1 Holders

Dr. David C. Auth
Michael A. and Jan M. Baker
Jan P. Barker
Boston Scientific Corporation
Bowman Living Trust
Harry B. Bremond Sep Prop Trust
Fred & Melody Bubank Family Trust
Buch Revocable Trust
Annette Campbell-White
Andrew Chase
George Y. Choi
Charles R. Clark III
Morgan Stanley Smith Barney LLC, Custodian
For F/B/O Ronald C. Conway IRA
Wallace H. Coulter Foundation
CVF, LLC
De Novo Ventures III Liquidating Trust
DeSoto Securities Company
Carol Dickey
Edgemere LLC
Frank M. Fischer
Peggy Woodford Forbes Sep Prop Trust
The Gould Family 1994 Trust
Robert & Susan Green Revocable Trust
James E. Guth Revocable Trust
James E. Guth, IRA
Ephraim Heller, Trustee, Ephraim Heller Sep. Prop Trust dated 10-6-06
Higgerson Revocable Trust UAD 4/6/90
David R. Holbrooke
David Reese Holbrooke Rev. Trust
Grant M. Inman & Suanne B. Inman,
Trustees Inman Living Trust
Amir P. Izadpanah
Susan Jackson Trust dated September 15, 1989
Jupiter Partners
Christopher Kaster
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.
LVP III Partners, L.P.
Leerink Revelation Healthcare Fund I, L.P.
Charles T. Liamos

Limit & Co.
Allan May Revocable Trust
James Meyer
Christopher Meyer Trust
Momsen Living Trust U/A/D 1/5/95
Montreux Equity Partners II SBIC, L.P.
Montreux Equity Partners III SBIC, L.P.
Robert Moreland
Philip E. Oyer
Penn Mutual Life Insurance Co.
Permalon Ltd.
Phoenix Companies, Inc. Employee Pension Plan Trust
Phoenix Life Insurance Company
Phoenix Life Insurance Company Employee Pension Plan
Stuart Mark Rosenberg
Shea Ventures LLC
Survivor's Trust U/A Eighth-E & M Shea Revocable Trust
Daniel R. Skimore
Stetson Capital Fund, L.P.
Hira Thapliyal
Sally Goodwin Tully
US Bank National Association, Trustee of the
Allete and Affiliate Companies Master Pension Trust
The Van Ness 1983 Revocable Trust
PENSCO Trust Company LLC Custodian FBO
William D. Van Ness IRAWS Investment Co, LLC (2002A)
WS Investment Co, LLC (2002C)

Series B-1 Holders
Michael A. and Jan M. Baker
Jan P. Barker
Boston Scientific Corporation
Bowman Living Trust
Harry B. Bremond Sep Prop Trust
Fred & Melody Bubank Family Trust
Buch Revocable Trust
Annette Campbell-White
Andrew Chase
George Y. Choi
Charles R. Clark III
Morgan Stanley Smith Barney LLC, Custodian
For F/B/O Ronald C. Conway IRA
Wallace H. Coulter Foundation
CVF, LLC
De Novo Ventures III Liquidating Trust

DeSoto Securities Company
Carol Dickey
Edgemere LLC
Frank M. Fischer
Peggy Woodford Forbes Sep Prop Trust
The Gould Family 1994 Trust
Robert & Susan Green Revocable Trust
James E. Guth Revocable Trust
James E. Guth, IRA
Ephraim Heller, Trustee, Ephraim Heller Sep. Prop Trust dated 10-6-06
Higgerson Revocable Trust UAD 4/6/90
David R. Holbrooke
David Reese Holbrooke Rev. Trust
Grant M. Inman & Suanne B. Inman,
Trustees Inman Living Trust
Amir P. Izadpanah
Susan Jackson Trust dated September 15, 1989
Jupiter Partners
Christopher Kaster
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.
LVP III Partners, L.P.
Leerink Revelation Healthcare Fund I, L.P.
Charles T. Liamos
Limit & Co.
Allan May Revocable Trust
James Meyer
Christopher Meyer Trust
Momsen Living Trust U/A/D 1/5/95
Montreux Equity Partners II SBIC, L.P.
Montreux Equity Partners III SBIC, L.P.
Robert Moreland
Philip E. Oyer
Penn Mutual Life Insurance Co.
Permalon Ltd.
Phoenix Companies, Inc. Employee Pension Plan Trust
Phoenix Life Insurance Company
Phoenix Life Insurance Company Employee Pension Plan
Stuart Mark Rosenberg
Shea Ventures LLC
Survivor’s Trust U/A Eighth-E & M Shea Revocable Trust
Daniel R. Skimore
Stetson Capital Fund, L.P.
Hira Thapliyal
Sally Goodwin Tully

US Bank National Association, Trustee of the
Allete and Affiliate Companies Master Pension Trust
The Van Ness 1983 Revocable Trust
PENSCO Trust Company LLC Custodian FBO
William D. Van Ness IRA
Venture Lending & Leasing IV, LLC
Venture Lending & Leasing V, LLC
WS Investment Co, LLC (2002A)
WS Investment Co, LLC (2002C)

Series C-1 Holders

Michael A. and Jan M. Baker
Jan P. Barker
Boston Scientific Corporation
Bowman Living Trust
Harry B. Bremond Sep Prop Trust
Fred & Melody Bubank Family Trust
Buch Revocable Trust
Annette Campbell-White
Andrew Chase
George Y. Choi
Charles R. Clark III
Morgan Stanley Smith Barney LLC, Custodian
For F/B/O Ronald C. Conway IRA
Wallace H. Coulter Foundation
CVF, LLC
De Novo Ventures III Liquidating Trust
DeSoto Securities Company
Carol Dickey
Edgemere LLC
Frank M. Fischer
Peggy Woodford Forbes Sep Prop Trust
The Gould Family 1994 Trust
Robert & Susan Green Revocable Trust
James E. Guth Revocable Trust
James E. Guth, IRA
HealthCap V L.P.
Ephraim Heller, Trustee, Ephraim Heller Sep. Prop Trust dated 10-6-06
Higgerson Revocable Trust UAD 4/6/90
David R. Holbrooke
David Reese Holbrooke Rev. Trust
Grant M. Inman & Suanne B. Inman,
Trustees Inman Living Trust
Amir P. Izadpanah

Susan Jackson Trust dated September 15, 1989
Jupiter Partners
Kaiser Permanente Federation LLC – Series I
Kaiser Permanente Ventures LLC – Series A
Kaiser Permanente Ventures LLC – Series B
The Permanente Federation LLC – Series I
Christopher Kaster
KPCB Holdings, Inc., as nominee
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.
LVP III Partners, L.P.
Leerink Revelation Healthcare Fund I, L.P.
Henry F. Lenartz and Nona M. Lenartz, Trustees, the
Lenartz Family Trust, U/D/T dated January 25, 1990
Charles T. Liamos
Limit & Co.
Allan May Revocable Trust
James Meyer
Christopher Meyer Trust
Momsen Living Trust U/A/D 1/5/95
Montreux Equity Partners II SBIC, L.P.
Montreux Equity Partners III SBIC, L.P.
Robert Moreland
OFP V Advisor AB
Philip E. Oyer
Penn Mutual Life Insurance Co.
Permalon Ltd.
Phoenix Companies, Inc. Employee Pension Plan Trust
Phoenix Life Insurance Company
Phoenix Life Insurance Company Employee Pension Plan
Stuart Mark Rosenberg
Shea Ventures LLC
Survivor's Trust U/A Eighth-E & M Shea Revocable Trust
Daniel R. Skimore
Stetson Capital Fund, L.P.
Hira Thapliyal
Sally Goodwin Tully
US Bank National Association, Trustee of the
Allete and Affiliate Companies Master Pension Trust
The Van Ness 1983 Revocable Trust
PENSCO Trust Company LLC Custodian FBO
William D. Van Ness IRA
Venture Lending & Leasing IV, LLC
Venture Lending & Leasing V, LLC
WS Investment Co, LLC (2002A)

Series D-1 Holders

Boston Scientific Corporation
Bowman Living Trust
Harry B. Bremond Sep Prop Trust
Annette Campbell-White
Andrew Chase
Todd Cornell
Wallace H. Coulter Foundation
CVF, LLC
De Novo Ventures III Liquidating Trust
DeSoto Securities Company
Sami El Hamdi
Frank M. Fischer
Peggy Woodford Forbes Sep Prop Trust
Werner Glockner
The Gould Family 1994 Trust
James E. Guth Revocable Trust
HealthCap V L.P.
Ephraim Heller, Trustee, Ephraim Heller Sep. Prop Trust dated 10-6-06
Higgerson Revocable Trust UAD 4/6/90
David R. Holbrooke
Grant M. Inman & Suanne B. Inman,
Trustees Inman Living Trust
Susan Jackson Trust dated September 15, 1989
Jupiter Partners
Kaiser Permanente Ventures LLC – Series A
Kaiser Permanente Ventures LLC – Series B
The Permanente Federation LLC – Series J
Christopher Kaster
KPCB Holdings, Inc., as nominee
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.
LVP III Partners, L.P.
Charles T. Liamos
Limit & Co.
Robert Moreland
OFP V Advisor AB
Philip E. Oyer
Phoenix Companies, Inc. Employee Pension Plan Trust
Phoenix Life Insurance Company
Stuart Mark Rosenberg
Survivor’s Trust U/A Eighth-E & M Shea Revocable Trust

Peter Svensson
Steven Thomas
The Van Ness 1983 Revocable Trust
Venture Lending & Leasing IV, LLC
Venture Lending & Leasing V, LLC

Series E-1 Holders
Jan P. Barker
Boston Scientific Corporation
Bowman Living Trust
Harry B. Bremond Sep Prop Trust
Annette Campbell-White
Andrew Chase
George Y. Choi
Wallace H. Coulter Foundation
CVF, LLC
De Novo Ventures III Liquidating Trust
DeSoto Securities Company
Carol Dickey
Edgemere LLC
Frank M. Fischer
Peggy Woodford Forbes Sep Prop Trust
The Gould Family 1994 Trust
Robert & Susan Green Revocable Trust
James E. Guth Revocable Trust
James E. Guth, IRA
HealthCap V L.P.
Ephraim Heller, Trustee, Ephraim Heller Sep. Prop Trust dated 10-6-06
Higgerson Revocable Trust UAD 4/6/90
David R. Holbrooke
Grant M. Inman & Suanne B. Inman,
Trustees Inman Living Trust
Susan Jackson Trust dated September 15, 1989
Jupiter Partners
Kaiser Permanente Ventures LLC – Series A
Kaiser Permanente Ventures LLC – Series B
The Permanente Federation LLC – Series J
Christopher Kaster
KPCB Holdings, Inc., as nominee
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.
LVP III Partners, L.P.
Leerink Revelation Healthcare Fund I, L.P.
Charles T. Liamos

Limit & Co.
James Meyer
Christopher Meyer Trust
Momsen Living Trust U/A/D 1/5/95
Montreux Equity Partners II SBIC, L.P.
Montreux Equity Partners III SBIC, L.P.
Robert Moreland
OFCO Club V
Philip E. Oyer
Penn Mutual Life Insurance Co.
Permalon Ltd.
Phoenix Companies, Inc. Employee Pension Plan Trust
Phoenix Life Insurance Company
Phoenix Life Insurance Company Employee Pension Plan
Stuart Mark Rosenberg
Shea Ventures LLC
Shea Ventures Opportunity Fund II, LP
Survivor's Trust U/A Eighth-E & M Shea Revocable Trust
Hira Thapliyal
US Bank National Association, Trustee of the
Allete and Affiliate Companies Master Pension Trust
The Van Ness 1983 Revocable Trust
Venture Lending & Leasing IV, LLC
Venture Lending & Leasing V, LLC
WS Investment Co., LLC (2002A)
WS Investment Co., LLC (2002C)

Series F-1 Holders
Boston Scientific Corporation

Series G-1 Holders
ABG-Pulmonx Limited
ABG YY Limited
ArrowMark Life Science Fund, LP
ArrowMark Fundamental Opportunity Fund, L.P.
Ashland University
Boston Scientific Corporation
Driehaus Life Sciences Fund, L.P.
Kaiser Permanente Ventures, LLC – Series A
Kaiser Permanente Ventures, LLC – Series B
The Permanente Federation, LLC – Series J
LVP Life Science Ventures III, L.P.
LVP III Associates, L.P.

LVP III Partners, L.P.
Meridian Small Cap Growth Fund
Montreux Growth Partners II L.P.
RTW Master Fund, Ltd.
RTW Innovation Master Fund, Ltd.
Shea Ventures Opportunity Fund II, LP

PULMONX CORPORATION

2010 STOCK PLAN

(Amended as of January 20, 2015)

1. **Purposes of the Plan**. The purposes of this 2010 Stock Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees and Consultants and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant of an option and subject to the applicable provisions of Section 422 of the Code and the regulations promulgated thereunder. Stock purchase rights may also be granted under the Plan. The Plan shall become effective upon its approval by the Board (the "Effective Date"). The Plan shall supersede the Company's Amended and Restated 2000 Stock Plan (the "2000 Plan") effective as of the Effective Date such that no further awards shall be made under the 2000 Plan on or after such date. However, this Plan shall not, in any way, affect awards under the 2000 Plan that are outstanding as of the Effective Date.

2. **Definitions**. As used herein, the following definitions shall apply:

(a) **"Administrator"** means the Board or its Committee appointed pursuant to Section 4 of the Plan.

(b) **"Affiliate"** means an entity other than a Subsidiary (as defined below) which, together with the Company, is under common control of a third person or entity.

(c) **"Applicable Laws"** means the legal requirements relating to the administration of stock option and restricted stock purchase plans under applicable U.S. state corporate laws, U.S. federal and applicable state securities laws, the Code, any Stock Exchange rules or regulations and the applicable laws of any other country or jurisdiction where Options or Stock Purchase Rights are granted under the Plan, as such laws, rules, regulations and requirements shall be in place from time to time.

(d) **"Board"** means the Board of Directors of the Company.

(e) **"Cause"** for termination of a Participant's Continuous Service Status will exist, unless another applicable definition is provided in the Option Agreement, Restricted Stock Purchase Agreement, applicable employment agreement or other applicable agreement, if the Participant is terminated for any of the following reasons: (i) Participant's willful failure substantially to perform his or her duties and responsibilities to the Company or deliberate violation of a Company policy; (ii) Participant's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in material injury to the Company; (iii) unauthorized use or disclosure by Participant of any proprietary information or trade secrets of the Company or any other party to whom the Participant owes an obligation of nondisclosure as a result of his or her relationship with the

Company; or (iv) Participant's willful breach of any of his or her obligations under any written agreement or covenant with the Company. The determination as to whether a Participant is being terminated for Cause shall be made in good faith by the Company and shall be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time as provided in Section 5(d) below, and the term "Company" will be interpreted to include any Subsidiary, Parent, Affiliate or successor thereto, if appropriate.

(f) **"Change of Control"** means a sale of all or substantially all of the Company's assets, or any merger or consolidation of the Company with or into another corporation other than a merger or consolidation in which the holders of more than 50% of the shares of capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by the voting securities remaining outstanding or by their being converted into voting securities of the surviving entity) more than 50% of the total voting power represented by the voting securities of the Company, or such surviving entity, outstanding immediately after such transaction.

(g) **"Code"** means the Internal Revenue Code of 1986, as amended.

(h) **"Committee"** means one or more committees or subcommittees of the Board appointed by the Board to administer the Plan in accordance with Section 4 below.

(i) **"Common Stock"** means the Common Stock of the Company.

(j) **"Company"** means Pulmonx Corporation, a Delaware corporation.

(k) **"Consultant"** means any person, including an advisor, who is engaged by the Company or any Parent, Subsidiary or Affiliate to render services and is compensated for such services, and any director of the Company whether compensated for such services or not.

(l) **"Continuous Service Status"** means the absence of any interruption or termination of service as an Employee or Consultant. Continuous Service Status as an Employee or Consultant shall not be considered interrupted in the case of: (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Administrator, provided that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; or (iv) in the case of transfers between locations of the Company or between the Company, its Parents, Subsidiaries, Affiliates or their respective successors. A change in status from an Employee to a Consultant or from a Consultant to an Employee will not constitute an interruption of Continuous Service Status.

(m) **"Corporate Transaction"** means a sale of all or substantially all of the Company's assets, or a merger, consolidation or other capital reorganization of the Company with or into another corporation and includes a Change of Control.

(n) **"Director"** means a member of the Board.

(o) **"Employee"** means any person employed by the Company or any Parent, Subsidiary or Affiliate, with the status of employment determined based upon such factors as are deemed appropriate by the Administrator in its discretion, subject to any requirements of the Code or the Applicable Laws. The payment by the Company of a director's fee to a Director shall not be sufficient to constitute "employment" of such Director by the Company.

(p) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.

(q) **"Fair Market Value"** means, as of any date, the fair market value of the Common Stock, as determined by the Administrator in good faith on such basis as it deems appropriate and applied consistently with respect to Participants. Whenever possible, the determination of Fair Market Value shall be based upon the closing price for the Shares as reported in the Wall Street Journal for the applicable date. Not withstanding anything herein to the contrary, the Fair Market Value of the Common Stock shall be determined consistent with Section 409A or Section 422 of the Code, to the extent applicable.

(r) **"Incentive Stock Option"** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable Option Agreement.

(s) **"Involuntary Termination"** means termination of a Participant's Continuous Service Status under the following circumstances: (i) termination without Cause by the Company or a Subsidiary, Parent, Affiliate or successor thereto, as appropriate; or (ii) voluntary termination by the Participant within 90 days following (A) a material reduction in the Participant's job responsibilities, provided that neither a mere change in title alone nor reassignment following a Change of Control to a position that is substantially similar to the position held prior to the Change of Control shall constitute a material reduction in job responsibilities; (B) relocation by the Company or a Subsidiary, Parent, Affiliate or successor thereto, as appropriate, of the Participant's work site to a facility or location more than 50 miles from the Participant's principal work site for the Company at the time of the Change of Control; or (C) a reduction in Participant's then-current base salary by at least 50%, provided that an across-the-board reduction in the salary level of all other employees or consultants in positions similar to the Participant's by the same percentage amount as part of a general salary level reduction shall not constitute such a salary reduction.

(t) **"Listed Security"** means any security of the Company that is listed or approved for listing on a national securities exchange or designated or approved for designation as a national market system security on an interdealer quotation system by the National Association of Securities Dealers, Inc.

(u) **"Nonstatutory Stock Option"** means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable Option Agreement.

(v) **"Option"** means a stock option granted pursuant to the Plan.

(w) **"Option Agreement"** means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of an Option granted under the Plan and includes any documents attached to or incorporated into such Option Agreement, including, but not limited to, a notice of stock option grant and a form of exercise notice.

(x) **"Option Exchange Program"** means a program approved by the Administrator whereby outstanding Options are exchanged for Options with a lower exercise price or are amended to decrease the exercise price as a result of a decline in the Fair Market Value of the Common Stock.

(y) **"Optioned Stock"** means the Common Stock subject to an Option.

(z) **"Optionee"** means an Employee or Consultant who receives an Option.

(aa) **"Parent"** means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code, or any successor provision.

(bb) **"Participant"** means any holder of one or more Options or Stock Purchase Rights, or the Shares issuable or issued upon exercise of such awards, under the Plan.

(cc) **"Plan"** means this 2010 Stock Plan.

(dd) **"Reporting Person"** means an officer, Director, or greater than ten percent shareholder of the Company within the meaning of Rule 16a-2 under the Exchange Act, who is required to file reports pursuant to Rule 16a-3 under the Exchange Act.

(ee) **"Restricted Stock"** means Shares of Common Stock acquired pursuant to a grant of a Stock Purchase Right under Section 11 below.

(ff) **"Restricted Stock Purchase Agreement"** means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of a Stock Purchase Right granted under the Plan and includes any documents attached to such agreement.

(gg) **"Rule 16b-3"** means Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision.

(hh) **"Section 409A"** means Section 409A of the Code and the regulations promulgated thereunder.

(ii) **"Share"** means a share of the Common Stock, as adjusted in accordance with Section 14 of the Plan.

(jj) **"Stock Exchange"** means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(kk) **"Stock Purchase Right"** means the right to purchase Common Stock pursuant to Section 11 below.

(ll) **"Subsidiary"** means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code, or any successor provision.

(mm) **"Ten Percent Holder"** means a person who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary.

3. **Stock Subject to the Plan**. Subject to the provisions of Section 14 of the Plan, the maximum aggregate number of Shares that may be sold under the Plan is 24,347,819 Shares of Common Stock. The foregoing limit shall be construed to comply with Section 422 of the Code. The Shares may be authorized, but unissued, or reacquired Common Stock. If an award should expire or become unexercisable for any reason without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grant under the Plan. In addition, any Shares of Common Stock which are retained by the Company upon exercise of an award in order to satisfy the exercise or purchase price for such award or any withholding taxes due with respect to such exercise or purchase shall be treated as not issued and shall continue to be available under the Plan. Shares issued under the Plan and later repurchased by the Company pursuant to any repurchase right which the Company may have shall not be available for future grant under the Plan.

4. **Administration of the Plan**.

(a) **General**. The Plan shall be administered by the Board or a Committee, or a combination thereof, as determined by the Board. The Plan may be administered by different administrative bodies with respect to different classes of Participants and, if permitted by the Applicable Laws, the Board may authorize one or more officers to make awards under the Plan.

(b) **Committee Composition**. If a Committee has been appointed pursuant to this Section 4, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of any Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies (however caused) and remove all members of a Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws and, in the case of a Committee administering the Plan in accordance with the requirements of Rule 16b-3 or Section 162(m) of the Code, to the extent permitted or required by such provisions.

(c) **Powers of the Administrator**. Subject to the provisions of the Plan and in the case of a Committee, the specific duties delegated by the Board to such Committee, the Administrator shall have the authority, in its discretion:

(i) to determine the Fair Market Value of the Common Stock, in accordance with Section 2(q) of the Plan, provided that such determination shall be applied consistently with respect to Participants under the Plan;

(ii) to select the Employees and Consultants to whom Options and Stock Purchase Rights may from time to time be granted;

(iii) to determine whether and to what extent Options and Stock Purchase Rights are granted;

(iv) to determine the number of Shares of Common Stock to be covered by each award granted;

(v) to approve the form(s) of agreement(s) used under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any award granted hereunder, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option, Optioned Stock, Stock Purchase Right or Restricted Stock, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vii) to determine whether and under what circumstances an Option may be settled in cash under Section 10(c) instead of Common Stock;

(viii) to implement an Option Exchange Program on such terms and conditions as the Administrator in its discretion deems appropriate, provided that no amendment or adjustment to an Option that would materially and adversely affect the rights of any Optionee shall be made without the prior written consent of the Optionee;

(ix) to adjust the vesting of an Option held by an Employee or Consultant as a result of a change in the terms or conditions under which such person is providing services to the Company;

(x) to construe and interpret the terms of the Plan and awards granted under the Plan, which constructions, interpretations and decisions shall be final and binding on all Participants; and

(xi) in order to fulfill the purposes of the Plan, to modify grants of Options or Stock Purchase Rights to Participants who are foreign nationals or employed outside of the United States in order to recognize differences in local law, tax policies or customs.

5. **Eligibility**.

(a) **Recipients of Grants**. Nonstatutory Stock Options and Stock Purchase Rights may be granted to Employees and Consultants. Incentive Stock Options may be granted only to Employees, provided that Employees of Affiliates shall not be eligible to receive Incentive Stock Options. Eligibility for Nonstatutory Stock Options is further limited to those otherwise eligible individuals as to whom the Company would be an "eligible issuer of service recipient stock" under Section 1.409A-1(b)(5)(iii)(E) of the Treasury Regulations.

(b) **Type of Option**. Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option.

(c) **ISO $100,000 Limitation**. Notwithstanding any designation under Section 5(b), to the extent that the aggregate Fair Market Value of Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(c), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.

(d) **No Employment Rights**. The Plan shall not confer upon any Participant any right with respect to continuation of an employment or consulting relationship with the Company, nor shall it interfere in any way with such Participant's right or the Company's right to terminate his or her employment or consulting relationship at any time, with or without Cause.

6. **Term of Plan**. The Plan shall become effective upon its adoption by the Board. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 16 of the Plan.

7. **Term of Option**. The term of each Option shall be the term stated in the Option Agreement; provided that the term shall be no more than ten years from the date of grant thereof or such shorter term as may be provided in the Option Agreement and provided further that, in the case of an Incentive Stock Option granted to a person who at the time of such grant is a Ten Percent Holder, the term of the Option shall be five years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.

8. **Reserved**.

9. **Option Exercise Price and Consideration**.

(a) **Exercise Price**. The per Share exercise price for the Shares to be issued pursuant to exercise of an Option shall be such price as is determined by the Administrator and set forth in the Option Agreement, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who at the time of grant is a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant; or

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option

(A) granted prior to the date, if any, on which the Common Stock becomes a Listed Security to a person who is at the time of grant is a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant;

(B) granted prior to the date, if any, on which the Common Stock becomes a Listed Security to any other eligible person, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant; or

(C) granted on or after the date, if any, on which the Common Stock becomes a Listed Security to any eligible person, the per share Exercise Price shall be such price as determined by the Administrator provided the per share Exercise Price shall be no less than 100% of the Fair Market Value on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction, to the extent permitted under Section 409A.

(b) **Permissible Consideration**. The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant) and may consist entirely of (1) cash; (2) check; (3) delivery of Optionee's promissory note with such recourse, interest, security and redemption provisions as the Administrator determines to be appropriate; (4) cancellation of indebtedness of the Company to Optionee; (5) other Shares that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which the Option is exercised, provided that in the case of Shares acquired, directly or indirectly, from the Company, such Shares must have been owned by the Optionee for more than six months on the date of surrender (or such other period as determined by the Administrator); (6) delivery of a properly executed exercise notice together

with such other documentation as the Administrator and a securities broker approved by the Company shall require to effect exercise of the Option and prompt delivery to the Company of the sale or loan proceeds required to pay the exercise price and any applicable withholding taxes; (7) any combination of the foregoing methods of payment; or (8) such other consideration and method of payment permitted under Applicable Laws. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company and the Administrator may, in its sole discretion, refuse to accept a particular form of consideration at the time of any Option exercise.

10. **Exercise of Option**.

(a) **General**.

(i) **Exercisability**. Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, consistent with the term of the Plan and reflected in the Option Agreement, including vesting requirements and/or performance criteria with respect to the Company and/or the Optionee; provided however that, if required by the Applicable Laws, any Option granted prior to the date, if any, upon which the Common Stock becomes a Listed Security shall become exercisable at the rate of at least 20% per year over five years from the date the Option is granted. In the event that any of the Shares issued upon exercise of an Option (which exercise occurs prior to the date, if any, upon which the Common Stock becomes a Listed Security) should be subject to a right of repurchase in the Company's favor, such repurchase right shall, if required by the Applicable Laws, lapse at the rate of at least 20% per year over five years from the date the Option is granted. Notwithstanding the above, in the case of an Option granted to an officer, Director or Consultant of the Company or any Parent, Subsidiary or Affiliate of the Company, the Option may become fully exercisable, or a repurchase right, if any, in favor of the Company shall lapse, at any time or during any period established by the Administrator. The Administrator shall have the discretion to determine whether and to what extent the vesting of Options shall be tolled during any unpaid leave of absence; provided, however, that in the absence of such determination, vesting of Options shall be tolled during any such leave.

(ii) **Minimum Exercise Requirements**. An Option may not be exercised for a fraction of a Share. The Administrator may require that an Option be exercised as to a minimum number of Shares, provided that such requirement shall not prevent an Optionee from exercising the full number of Shares as to which the Option is then exercisable.

(iii) **Procedures for and Results of Exercise**. An Option shall be deemed exercised when written notice of such exercise has been given to the Company in accordance with the terms of the Option by the person entitled to exercise the Option and the Company has received full payment for the Shares with respect to which the Option is exercised. Full payment may, as authorized by the Administrator, consist of any consideration and method of payment allowable under Section 9(b) of the Plan, provided that the Administrator may, in its sole discretion, refuse to accept any form of consideration at the time of any Option exercise.

Exercise of an Option in any manner shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(iv) **Rights as Shareholder**. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. No adjustment will be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued.

(b) **Termination of Employment or Consulting Relationship**. Except as otherwise set forth in this Section 10(b), the Administrator shall establish and set forth in the applicable Option Agreement the terms and conditions upon which an Option shall remain exercisable, if at all, following termination of an Optionee's Continuous Service Status, which provisions may be waived or modified by the Administrator at any time. To the extent that the Optionee is not entitled to exercise an Option at the date of his or her termination of Continuous Service Status, or if the Optionee (or other person entitled to exercise the Option) does not exercise the Option to the extent so entitled within the time specified in the Option Agreement or below (as applicable), the Option shall terminate with no consideration due to the Optionee and the Optioned Stock underlying the unexercised portion of the Option shall revert to the Plan. In no event may any Option be exercised after the expiration of the Option term as set forth in the Option Agreement (and subject to Section 7).

The following provisions (1) shall apply to the extent an Option Agreement does not specify the terms and conditions upon which an Option shall terminate upon termination of an Optionee's Continuous Service Status, and (2) establish the minimum post-termination exercise periods that may be set forth in an Option Agreement:

(i) **Termination other than Upon Disability or Death or for Cause**. In the event of termination of an Optionee's Continuous Service Status, such Optionee may exercise an Option for 30 days following such termination to the extent the Optionee was entitled to exercise it at the date of such termination. No termination shall be deemed to occur and this Section 10(b)(i) shall not apply if (i) the Optionee is a Consultant who becomes an Employee, or (ii) the Optionee is an Employee who becomes a Consultant.

(ii) **Disability of Optionee**. In the event of termination of an Optionee's Continuous Service Status as a result of his or her disability (including a disability within the meaning of Section 22(e)(3) of the Code), such Optionee may exercise an Option at any time within six months following such termination to the extent the Optionee was entitled to exercise it at the date of such termination.

(iii) **Death of Optionee**. In the event of the death of an Optionee during the period of Continuous Service Status since the date of grant of the Option, or within thirty days following termination of Optionee's Continuous Service Status, the Option may be exercised by Optionee's estate or by a person who acquired the right to exercise the Option by

bequest or inheritance, subject to delivery of proof of the same to the Administrator, at any time within twelve months following the date of death, but only to the extent of the right to exercise that had accrued at the date of death or, if earlier, the date the Optionee's Continuous Service Status terminated.

(iv) **Termination for Cause**. In the event of termination of an Optionee's Continuous Service Status for Cause, any Option (including any exercisable portion thereof) held by such Optionee shall immediately terminate in its entirety with no consideration due to the Optionee upon first notification to the Optionee of termination of the Optionee's Continuous Service Status. If an Optionee's employment or consulting relationship with the Company is suspended pending an investigation of whether the Optionee shall be terminated for Cause, all the Optionee's rights under any Option likewise shall be suspended during the investigation period and the Optionee shall have no right to exercise any Option.

(c) **Buyout Provisions**. The Administrator may at any time offer to buy out for a payment in cash or Shares an Option previously granted under the Plan based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made. Any such buyout shall be done in a manner that complies with Applicable Laws, including the requirements of Section 409A.

11. **Stock Purchase Rights**.

(a) **Rights to Purchase**. When the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing of the terms, conditions and restrictions related to the offer, including the number of Shares that such person shall be entitled to purchase, the price to be paid, and the time within which such person must accept such offer. If the Applicable Laws do not impose the requirements set forth in the preceding sentence and with respect to any Stock Purchase Rights granted after the date, if any, on which the Common Stock becomes a Listed Security, the purchase price of Shares subject to Stock Purchase Rights shall be as determined by the Administrator. The offer to purchase Shares subject to Stock Purchase Rights shall be accepted by execution of a Restricted Stock Purchase Agreement in the form determined by the Administrator. The permissible consideration for Stock Purchase Rights shall be determined by the Administrator and shall be the same as is set forth in Section 9(b) with respect to exercise of Options.

(b) **Repurchase Option**. Unless the Administrator determines otherwise, the Restricted Stock Purchase Agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's employment with the Company for any reason (including death or disability). The purchase price for Shares repurchased pursuant to the Restricted Stock Purchase Agreement shall be the lower of (i) the original purchase price paid by the purchaser or (ii) the Fair Market Value of a Share on the day of the termination of employment, and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at such rate as the Administrator may determine, provided that with respect to a Stock Purchase Right granted prior to the date, if any, on which the Common Stock becomes a Listed Security to a purchaser who is not an officer,

Director or Consultant of the Company or of any Parent or Subsidiary of the Company, it shall lapse at a minimum rate of 20% per year if required by the Applicable Laws.

(c) **Other Provisions**. The Restricted Stock Purchase Agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion. In addition, the provisions of Restricted Stock Purchase Agreements need not be the same with respect to each purchaser.

(d) **Rights as a Shareholder**. Once the Stock Purchase Right is exercised, the purchaser shall have the rights equivalent to those of a shareholder, and shall be a shareholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised.

12. **Taxes**.

(a) As a condition of the exercise of an Option or Stock Purchase Right granted under the Plan, the Participant (or in the case of the Participant's death, the person exercising the Option or Stock Purchase Right) shall make such arrangements as the Administrator may require for the satisfaction of any applicable federal, state, local or foreign withholding tax obligations that may arise in connection with the exercise of the Option or Stock Purchase Right and the issuance of Shares. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied. If the Administrator allows the withholding or surrender of Shares to satisfy a Participant's tax withholding obligations under this Section 12 (whether pursuant to Section 12(c), (d) or (e), or otherwise), the Administrator shall not allow Shares to be withheld in an amount that exceeds the minimum statutory withholding rates for federal and state tax purposes, including payroll taxes.

(b) In the case of an Employee and in the absence of any other arrangement, the Employee shall be deemed to have directed the Company to withhold or collect from his or her compensation an amount sufficient to satisfy such tax obligations from the next payroll payment otherwise payable after the date of an exercise of the Option or Stock Purchase Right.

(c) This Section 12(c) shall apply only after the date, if any, upon which the Common Stock becomes a Listed Security. In the case of Participant other than an Employee (or in the case of an Employee where the next payroll payment is not sufficient to satisfy such tax obligations, with respect to any remaining tax obligations), in the absence of any other arrangement and to the extent permitted under the Applicable Laws, the Participant shall be deemed to have elected to have the Company withhold from the Shares to be issued upon exercise of the Option or Stock Purchase Right that number of Shares having a Fair Market Value determined as of the applicable Tax Date (as defined below) equal to the minimum statutory amount required to be withheld. For purposes of this Section 12, the Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined under the Applicable Laws (the "Tax Date").

(d) If permitted by the Administrator, in its discretion, a Participant may satisfy his or her tax withholding obligations upon exercise of an Option or Stock Purchase Right by surrendering to the Company Shares that have a Fair Market Value determined as of the applicable Tax Date equal to the minimum statutory amount required to be withheld. In the case of shares previously acquired from the Company that are surrendered under this Section 12(d), such Shares must have been owned by the Participant for more than six (6) months on the date of surrender (or such other period of time as determined by the Administrator).

(e) Any election or deemed election by a Participant to have Shares withheld to satisfy tax withholding obligations under Section 12(c) or (d) above shall be irrevocable as to the particular Shares as to which the election is made and shall be subject to the consent or disapproval of the Administrator. Any election by a Participant under Section 12(d) above must be made on or prior to the applicable Tax Date.

(f) In the event an election to have Shares withheld is made by a Participant and the Tax Date is postponed under Section 83 of the Code because no election is filed under Section 83(b) of the Code, the Participant shall receive the full number of Shares with respect to which the Option or Stock Purchase Right is exercised but such Participant shall be unconditionally obligated to tender back to the Company the proper number of Shares on the Tax Date.

13. **Non-Transferability of Options and Stock Purchase Rights.**

(a) **General**. Except as set forth in this Section 13, Options and Stock Purchase Rights may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a beneficiary by an Optionee will not constitute a transfer. An Option or Stock Purchase Right may be exercised, during the lifetime of the holder of an Option or Stock Purchase Right, only by such holder or a transferee permitted by this Section 13.

(b) **Limited Transferability Rights**. Notwithstanding anything else in this Section 13, prior to the date, if any, on which the Common Stock becomes a Listed Security, the Administrator may in its discretion grant Nonstatutory Stock Options that may be transferred by instrument to an inter vivos or testamentary trust in which the Options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift to "Immediate Family" (as defined below), on such terms and conditions as the Administrator deems appropriate. Following the date, if any, on which the Common Stock becomes a Listed Security, the Administrator may in its discretion grant transferable Nonstatutory Stock Options pursuant to Option Agreements specifying the manner in which such Nonstatutory Stock Options are transferable. "Immediate Family 'means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and shall include adoptive relationships.

14. **Adjustments Upon Changes in Capitalization, Merger or Certain Other Transactions**.

(a) **Changes in Capitalization**. Subject to any required action by the shareholders of the Company, the number of Shares of Common Stock covered by each outstanding Option or Stock Purchase Right and the number of Shares of Common Stock that have been authorized for issuance under the Plan but as to which no Options or Stock Purchase Rights have yet been granted or that have been returned to the Plan upon cancellation or expiration of an Option or Stock Purchase Right, as well as the price per Share of Common Stock covered by each such outstanding Option or Stock Purchase Right, shall be proportionately adjusted for any increase or decrease in the number of issued Shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination, recapitalization or reclassification of the Common Stock, or any other increase or decrease in the number of issued Shares of Common Stock effected without receipt of consideration by the Company; provided, however, that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Administrator, whose determination in that respect shall be final, binding and conclusive.

Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares of Common Stock subject to an Option or Stock Purchase Right.

(b) **Dissolution or Liquidation**. In the event of the dissolution or liquidation of the Company, each Option and Stock Purchase Right will terminate immediately prior to the consummation of such action, unless otherwise determined by the Administrator.

(c) **Corporate Transaction**. Unless the Option Agreement, Stock Purchase Agreement, applicable employment agreement or other applicable agreement provides otherwise, in the event of a Corporate Transaction, each outstanding Option or Stock Purchase Right shall

be assumed or an equivalent option or right shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation (the "Successor Corporation"), unless the Successor Corporation does not agree to assume the award or to substitute an equivalent option or right, in which case such Option or Stock Purchase Right shall terminate upon the consummation of the transaction.

Notwithstanding the above, unless the Option Agreement, Stock Purchase Agreement, applicable employment agreement or other applicable agreement provides otherwise, in the event (i) of a Change of Control, and (ii) a Participant holding an Option or Stock Purchase Right assumed or substituted by the Successor Corporation in the Change of Control, or holding Restricted Stock issued upon exercise of an Option or Stock Purchase Right with respect to which the Successor Corporation has succeeded to a repurchase right as a result of the Change of Control, is Involuntarily Terminated by the Successor Corporation without Cause in connection with, or within 3 months following consummation of, the transaction, then any assumed or substituted Option or Stock Purchase Right held by the terminated Participant at the

time of termination shall accelerate and become exercisable as to the number of Shares that would otherwise have vested and been exercisable as of the date 30 days from the date of termination, and any repurchase right applicable to any Shares shall lapse as to the number of Shares as to which the repurchase right would otherwise have lapsed as of the date 30 days from the date of termination, in each case assuming the Participant remained in Continuous Service Status for such 30 day period. The acceleration of vesting and lapse of repurchase rights provided for in the previous sentence shall occur immediately prior to the effective date of the Participant's termination.

For purposes of this Section 14(c), an Option or a Stock Purchase Right shall be considered assumed, without limitation, if, at the time of issuance of the stock or other consideration upon a Corporate Transaction or a Change of Control, as the case may be, each holder of an Option or Stock Purchase Right would be entitled to receive upon exercise of the award the same number and kind of shares of stock or the same amount of property, cash or securities as such holder would have been entitled to receive upon the occurrence of the transaction if the holder had been, immediately prior to such transaction, the holder of the number of Shares of Common Stock covered by the award at such time (after giving effect to any adjustments in the number of Shares covered by the Option or Stock Purchase Right as provided for in this Section 14); provided that if such consideration received in the transaction is not solely common stock of the Successor Corporation, the Administrator may, with the consent of the Successor Corporation, provide for the consideration to be received upon exercise of the award to be solely common stock of the Successor Corporation equal to the Fair Market Value of the per Share consideration received by holders of Common Stock in the transaction.

(d) **Limitation on Payments**. In the event that the vesting acceleration or lapse of a repurchase right provided for in Section 14(c) above (x) constitutes "parachute payments" within the meaning of Section 280G of the Code, and (y) but for this Section 14(d) would be subject to the excise tax imposed by Section 4999 of the Code (or any corresponding provisions of state income tax law), then such vesting acceleration or lapse of a repurchase right shall be either

(A) delivered in full, or

(B) delivered as to such lesser extent which would result in no portion of such vesting acceleration being subject to excise tax under Code Section 4999, whichever amount, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Code Section 4999, results in the receipt by the Participant on an after-tax basis of the greater amount of acceleration or lapse of repurchase rights benefits, notwithstanding that all or some portion of such benefits may be taxable under Code Section 4999. Any determination required under this Section 14(d) shall be made in writing by the Company's independent accountants, whose determination shall be conclusive and binding for all purposes on the Company and any affected Participant. In the event that (A) above applies, then the Participant shall be responsible for any excise taxes imposed with respect to such benefits. In the event that (B) above applies, then each benefit provided hereunder shall be proportionately reduced to the extent necessary to avoid imposition of such excise taxes.

(e) **Certain Distributions**. In the event of any distribution to the Company's shareholders of securities of any other entity or other assets (other than dividends payable in cash or stock of the Company) without receipt of consideration by the Company, the Administrator may, in its discretion, to the extent permitted by Section 409A, appropriately adjust the price per Share of Common Stock covered by each outstanding Option or Stock Purchase Right to reflect the effect of such distribution.

(f) **Section 409A**. Any adjustments or actions contemplated by this Section 14 shall be done in a manner that complies with the requirements of Section 409A, to the extent applicable.

15. **Time of Granting Options and Stock Purchase Rights**. The date of grant of an Option or Stock Purchase Right shall, for all purposes, be the date on which the Administrator completes the corporate action necessary to create the legally binding right constituting such Option or Stock Purchase Right, or such other date as is determined by the Administrator. Notice of the determination shall be given to each Employee or Consultant to whom an Option or Stock Purchase Right is so granted within a reasonable time after the date of such grant.

16. **Amendment and Termination of the Plan**.

(a) **Authority to Amend or Terminate**. The Board may at any time amend, alter, suspend or discontinue the Plan, but no amendment, alteration, suspension or discontinuation (other than an adjustment pursuant to Section 14 above) shall be made that would materially and adversely affect the rights of any Optionee or holder of Stock Purchase Rights under any outstanding grant, without his or her consent. In addition, to the extent necessary and desirable to comply with the Applicable Laws, the Company shall obtain shareholder approval of any Plan amendment in such a manner and to such a degree as required.

(b) **Effect of Amendment or Termination**. No amendment or termination of the Plan shall materially and adversely affect Options or Stock Purchase Rights already granted, unless mutually agreed otherwise between the Optionee or holder of the Stock Purchase Rights and the Administrator, which agreement must be in writing and signed by the Optionee or holder and the Company.

17. **Conditions Upon Issuance of Shares**. Notwithstanding any other provision of the Plan or any agreement entered into by the Company pursuant to the Plan, the Company shall not be obligated, and shall have no liability for failure, to issue or deliver any Shares under the Plan unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. As a condition to the exercise of an Option or Stock Purchase Right, the Company may require the person exercising the award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by law.

18. **Reservation of Shares**. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

19. **Agreements**. Options and Stock Purchase Rights shall be evidenced by Option Agreements and Restricted Stock Purchase Agreements, respectively, in such form(s) as the Administrator shall from time to time approve.

20. **Shareholder Approval**. If required by the Applicable Laws, continuance of the Plan shall be subject to approval by the shareholders of the Company within twelve (12) months before or after the date the Plan is adopted. Such shareholder approval shall be obtained in the manner and to the degree required under the Applicable Laws.

21. **Information and Documents to Optionees and Purchasers**. Prior to the date, if any, upon which the Common Stock becomes a Listed Security and if required by the Applicable Laws, the Company shall provide financial statements at least annually to each Optionee and to each individual who acquired Shares pursuant to the Plan, during the period such Optionee or purchaser has one or more Options or Stock Purchase Rights outstanding, and in the case of an individual who acquired Shares pursuant to the Plan, during the period such individual owns such Shares. The Company shall not be required to provide such information if the issuance of Options or Stock Purchase Rights under the Plan is limited to key employees whose duties in connection with the Company assure their access to equivalent information.

22. **Limitation of Liability**. The awards granted under the Plan are intended to be exempt from Section 409A. Notwithstanding the foregoing, or anything to the contrary in the Plan, neither the Company, any subsidiary, nor the Board, nor any person acting on behalf of the Company, any subsidiary, or the Board, shall be liable to any participant or to the estate or beneficiary of any participant or to any other holder of an Option by reason of any acceleration of income, or any additional tax, asserted by reason of the failure of an Option to satisfy the requirements of Section 409A or by reason of Section 4999 of the Code.

PULMONX CORPORATION

2010 Stock Plan

NOTICE OF STOCK OPTION GRANT

_____
[Address]

You have been granted an option to purchase Common Stock of Pulmonx Corporation (the "Company") as follows:

Board Approval Date:	
Date of Grant (Later of Board Approval Date or Commencement of Employment/Consulting):	
Vesting Commencement Date:	
Exercise Price per Share:	$
Total Number of Shares Granted:	
Total Exercise Price:	
Type of Option:	[ISO/NSO]
Term/Expiration Date:	
Vesting/Exercise Schedule:	[This Option may be exercised, in whole or in part, at any time after the Date of Grant. So long as your employment or consulting relationship with the Company continues, this Option shall vest in accordance with the following schedule: 12/48ths of the total number of Shares underlying this Option shall vest on the first year anniversary of the Vesting Commencement Date and 1/48th of the total number of Shares underlying this Option shall vest on the same day of each month thereafter.]

Termination Period:	This Option may be exercised for 90 days after termination of employment or consulting relationship except as set out in Section 5 of the Stock Option Agreement (but in no event later than the Expiration Date). Optionee is responsible for keeping track of these exercise periods following termination for any reason of his or her service relationship with the Company. The Company will not provide further notice of such periods.
Transferability:	This Option may not be transferred.

By your signature and the signature of the Company's representative below, you and the Company agree that this option is granted under and governed by the terms and conditions of the Pulmonx 2010 Stock Plan and the Stock Option Agreement, both of which are attached and made a part of this document.

In addition, you agree and acknowledge that your rights to any Shares underlying the Option will be earned only as you provide services to the Company over time, that the grant of the Option is not as consideration for services you rendered to the Company prior to your Vesting Commencement Date, and that nothing in this Notice or the attached documents confers upon you any right to continue your employment or consulting relationship with the Company for any period of time, nor does it interfere in any way with your right or the Company's right to terminate that relationship at any time, for any reason, with or without cause. Also, the Exercise Price Per Share has been set at the fair market value of the Shares on the Date of Grant in good faith compliance with the applicable guidance issued by the IRS under Section 409A of the Code in order to avoid the Option being treated as deferred compensation under Section 409A of the Code. However, there is no guarantee that the IRS will agree with the valuation and, by signing below, you agree and acknowledge that the Company shall not be held liable for any applicable costs, taxes, or penalties associated with the Option if, in fact, the IRS were to determine that the Option constitutes deferred compensation under Section 409A of the Code. You should consult with your own tax advisor concerning the tax consequences of such a determination by the IRS.

PULMONX CORPORATION

_____

(signature)

By: _____

Glen French
President and CEO

PULMONX CORPORATION

2010 Stock Plan

STOCK OPTION AGREEMENT

1. **Grant of Option.** Pulmonx Corporation, a Delaware corporation (the "Company"), hereby grants to _____ ("Optionee"), an option (the "Option") to purchase the total number of shares of Common Stock (the "Shares") set forth in the Notice of Stock Option Grant (the "Notice"), at the exercise price per Share set forth in the Notice (the "Exercise Price") subject to the terms, definitions and provisions of the Pulmonx 2010 Stock Plan (the "Plan") adopted by the Company, which is incorporated in this Agreement by reference. Unless otherwise defined in this Agreement, the terms used in this Agreement shall have the meanings defined in the Plan.

2. **Designation of Option.** This Option is intended to be an Incentive Stock Option as defined in Section 422 of the Code only to the extent so designated in the Notice, and to the extent it is not so designated or to the extent the Option does not qualify as an Incentive Stock Option, it is intended to be a Nonstatutory Stock Option.

Notwithstanding the above, if designated as an Incentive Stock Option, in the event that the Shares subject to this Option (and all other Incentive Stock Options granted to Optionee by the Company or any Parent or Subsidiary, including under other plans of the Company) that first become exercisable in any calendar year have an aggregate fair market value (determined for each Share as of the date of grant of the option covering such Share) in excess of $100,000, the Shares in excess of $100,000 shall be treated as subject to a Nonstatutory Stock Option, in accordance with Section 5(c) of the Plan.

3. **Exercise of Option.** This Option shall be exercisable during its term in accordance with the Vesting/Exercise Schedule set out in the Notice and with the provisions of Section 10 of the Plan as follows:

(a) **Right to Exercise.**

(i) This Option may not be exercised for a fraction of a share.

(ii) In the event of Optionee's death, disability or other termination of employment, the exercisability of the Option is governed by Section 5 below, subject to the limitations contained in this Section 3.

(iii) In no event may this Option be exercised after the Expiration Date of the Option as set forth in the Notice.

(b) **Method of Exercise.**

(i) This Option shall be exercisable by execution and delivery of the Early Exercise Notice and Restricted Stock Purchase Agreement attached hereto as Exhibit A, the Exercise Notice and Restricted Stock Purchase Agreement attached hereto as Exhibit B, or any other form of written notice approved for such purpose by the Company which shall state Optionee's election to exercise the Option, the number of Shares in respect of which the Option is being exercised, and such other representations and agreements as to the holder's investment intent with respect to such Shares as may be required by the Company pursuant to the provisions of the Plan. Such written notice shall be signed by Optionee and shall be delivered to the Company by such means as are determined by the Plan Administrator in its discretion to constitute adequate delivery. The written notice shall be accompanied by payment of the Exercise Price. This Option shall be deemed to be exercised upon receipt by the Company of such written notice accompanied by the Exercise Price.

(ii) As a condition to the exercise of this Option and as further set forth in Section 12 of the Plan, Optionee agrees to make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the vesting or exercise of the Option, or disposition of Shares, whether by withholding, direct payment to the Company, or otherwise.

(iii) The Company is not obligated, and will have no liability for failure, to issue or deliver any Shares upon exercise of the Option unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. This Option may not be exercised until such time as the Plan has been approved by the shareholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any applicable federal or state securities or other law or regulation, including any rule under Part 221 of Title 12 of the Code of Federal Regulations as promulgated by the Federal Reserve Board. As a condition to the exercise of this Option, the Company may require Optionee to make any representation and warranty to the Company as may be required by the Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Optionee on the date on which the Option is exercised with respect to such Shares.

4. **Method of Payment.** Payment of the Exercise Price shall be by any of the following, or a combination of the following, at the election of Optionee:

(a) cash or check;

(b) prior to the date, if any, upon which the Common Stock becomes a Listed Security, by surrender of other shares of Common Stock of the Company that have an aggregate Fair Market Value on the date of surrender equal to the Exercise Price of the Shares as to which the Option is being exercised. In the case of shares acquired directly or indirectly from the Company, such shares must have been owned by Optionee for more than six (6) months on the date of surrender (or such other period of time as is necessary to avoid the Company's incurring adverse accounting charges); or

(c) following the date, if any, upon which the Common Stock is a Listed Security, delivery of a properly executed exercise notice together with irrevocable instructions to a broker approved by the Company to deliver promptly to the Company the amount of sale or loan proceeds required to pay the exercise price.

5. **Termination of Relationship.** Following the date of termination of Optionee's Continuous Service Status for any reason (the "Termination Date"), Optionee may exercise the Option only as set forth in the Notice and this Section 5. To the extent that Optionee is not entitled to exercise this Option as of the Termination Date, or if Optionee does not exercise this Option within the Termination Period set forth in the Notice or the termination periods set forth below, the Option shall terminate in its entirety. In no event, may any Option be exercised after the Expiration Date of the Option as set forth in the Notice.

(a) **Termination.** In the event of termination of Optionee's Continuous Service Status other than as a result of Optionee's disability or death, Optionee may, to the extent otherwise so entitled at the date of such termination (the "Termination Date"), exercise this Option during the Termination Period set forth in the Notice.

(b) **Other Terminations.** In connection with any termination other than a termination covered by Section 5(a), Optionee may exercise the Option only as described below:

(i) **Termination upon Disability of Optionee.** In the event of termination of Optionee's Continuous Service Status as a result of Optionee's disability, Optionee may, but only within twelve months from the Termination Date, exercise this Option to the extent Optionee was entitled to exercise it as of such Termination Date.

(ii) **Death of Optionee.** In the event of the death of Optionee (a) during the term of this Option and while an Employee or Consultant of the Company and having been in Continuous Service Status since the date of grant of the Option, or (b) within thirty (30) days after Optionee's Termination Date, the Option may be exercised at any time within twelve months following the date of death by Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent Optionee was entitled to exercise the Option as of the Termination Date.

6. **Non-Transferability of Option.** This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by him or her. The terms of this Option shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

7. **Tax Consequences.** Below is a brief summary as of the date of this Option of certain of the federal tax consequences of exercise of this Option and disposition of the Shares under the laws in effect as of the Date of Grant. THIS SUMMARY IS INCOMPLETE, AND THE TAX LAWS AND REGULATIONS ARE SUBJECT TO CHANGE. OPTIONEE SHOULD CONSULT A TAX ADVISER BEFORE EXERCISING THIS OPTION OR DISPOSING OF THE SHARES.

(a) **Incentive Stock Option.**

(i) **Tax Treatment upon Exercise and Sale of Shares.** If this Option qualifies as an Incentive Stock Option, there will be no regular federal income tax liability upon the exercise of the Option, although the excess, if any, of the fair market value of the Shares on the date of exercise over the Exercise Price will be treated as an adjustment to the alternative minimum tax for federal tax purposes and may subject Optionee to the alternative minimum tax in the year of exercise. If Shares issued upon exercise of an Incentive Stock Option are held for at least one year after exercise and are disposed of at least two years after the Option grant date, any gain realized on disposition of the Shares will also be treated as long-term capital gain for federal income tax purposes. If Shares issued upon exercise of an Incentive Stock Option are disposed of within such one-year period or within two years after the Option grant date, any gain realized on such disposition will be treated as compensation income (taxable at ordinary income rates) to the extent of the difference between the Exercise Price and the lesser of (i) the fair market value of the Shares on the date of exercise, or (ii) the sale price of the Shares.

(ii) **Notice of Disqualifying Dispositions.** With respect to any Shares issued upon exercise of an Incentive Stock Option, if Optionee sells or otherwise disposes of such Shares on or before the later of (i) the date two years after the Option grant date, or (ii) the date one year after the date of exercise, Optionee shall immediately notify the Company in writing of such disposition. Optionee acknowledges and agrees that he or she may be subject to income tax withholding by the Company on the compensation income recognized by Optionee from the early disposition by payment in cash or out of the current earnings paid to Optionee.

(b) **Nonstatutory Stock Option.** If this Option does not qualify as an Incentive Stock Option, there may be a regular federal (and state) income tax liability upon the exercise of the Option. Optionee will be treated as having received compensation income (taxable at ordinary income tax rates) equal to the excess, if any, of the fair market value of the Shares on the date of exercise over the Exercise Price. If Optionee is an Employee, the Company will be required to withhold from Optionee's compensation or collect from Optionee and pay to the applicable taxing authorities an amount equal to a percentage of this compensation income at the time of exercise. If Shares issued upon exercise of a Nonstatutory Stock Option are held for at least one year, any gain realized on disposition of the Shares will be treated as long-term capital gain for federal income tax purposes.

8. **Lock-Up Agreement.** In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Optionee hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of

the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed 180 days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering.

9. **Effect of Agreement.** Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof (and has had an opportunity to consult counsel regarding the Option terms), and hereby accepts this Option and agrees to be bound by its contractual terms as set forth herein and in the Plan. Optionee hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Plan Administrator regarding any questions relating to the Option. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of the Notice and this Agreement, the Plan terms and provisions shall prevail. The Option, including the Plan, constitutes the entire agreement between Optionee and the Company on the subject matter hereof and supersedes all proposals, written or oral, and all other communications between the parties relating to such subject matter.

[Signature Page Follows]

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one document.

PULMONX CORPORATION

_____

By: _____

(signature)

Glen French
President and CEO

EXHIBIT A

PULMONX CORPORATION

2010 Stock Plan

EARLY EXERCISE NOTICE AND RESTRICTED STOCK PURCHASE AGREEMENT

This Agreement ("Agreement") is made as of _____, by and between Pulmonx Corporation, a Delaware corporation (the "Company"), and _____ ("Purchaser"). To the extent any capitalized terms used in this Agreement are not defined, they shall have the meaning ascribed to them in the 2010 Stock Plan.

1. **Exercise of Option.** Subject to the terms and conditions hereof, Purchaser hereby elects to exercise his or her option to purchase _____ shares of the Common Stock (the "Shares") of the Company under and pursuant to the Company's 2010 Stock Plan (the "Plan") and the Notice of Stock Option Grant and Stock Option Agreement dated _____ (the "Option Agreement"). Of these Shares, Purchaser has elected to purchase _____ of those Shares which have become vested as of the date hereof under the Vesting Schedule set forth in the Notice of Stock Option Grant (the "Vested Shares") and _____ Shares which have not yet vested under such Vesting Schedule (the "Unvested Shares"). The purchase price for the Shares shall be $«ExercisePrice» per Share for a total purchase price of $_____. The term "Shares" refers to the purchased Shares and all securities received in replacement of the Shares or as stock dividends or splits, all securities received in replacement of the Shares in a recapitalization, merger, reorganization, exchange or the like, and all new, substituted or additional securities or other properties to which Purchaser is entitled by reason of Purchaser's ownership of the Shares.

2. **Time and Place of Exercise.** The purchase and sale of the Shares under this Agreement shall occur at the principal office of the Company simultaneously with the execution and delivery of this Agreement in accordance with the provisions of Section 3(b) of the Option Agreement. On such date, the Company will deliver to Purchaser a certificate representing the Shares to be purchased by Purchaser (which shall be issued in Purchaser's name) against payment of the exercise price therefor by Purchaser by (a) check made payable to the Company, (b) cancellation of indebtedness of the Company to Purchaser, (c) delivery of shares of the Common Stock of the Company in accordance with Section 4 of the Option Agreement, or (d) a combination of the foregoing.

3. **Limitations on Transfer.** In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not assign, encumber or dispose of any interest in the Shares while the Shares are subject to the Company's Repurchase Option (as defined below). After any Shares have been released from such Repurchase Option, Purchaser shall not assign, encumber or dispose of any interest in such Shares except in compliance with the provisions below and applicable securities laws.

(a) **Repurchase Option.**

(i) In the event of the voluntary or involuntary termination of Purchaser's employment or consulting relationship with the Company for any reason (including death or disability), with or without cause, the Company shall upon the date of such termination (the "Termination Date") have an irrevocable, exclusive option (the "Repurchase Option") for a period of 90 days from such date to repurchase all or any portion of the Shares held by Purchaser as of the Termination Date which have not yet been released from the Company's Repurchase Option at the original purchase price per Share specified in Section 1 (adjusted for any stock splits, stock dividends and the like).

(ii) Unless the Company notifies Purchaser within 90 days from the date of termination of Purchaser's employment or consulting relationship that it does not intend to exercise its Repurchase Option with respect to some or all of the Shares, the Repurchase Option shall be deemed automatically exercised by the Company as of the 90th day following such termination, provided that the Company may notify Purchaser that it is exercising its Repurchase Option as of a date prior to such 90th day. Unless Purchaser is otherwise notified by the Company pursuant to the preceding sentence that the Company does not intend to exercise its Repurchase Option as to some or all of the Shares to which it applies at the time of termination, execution of this Agreement by Purchaser constitutes written notice to Purchaser of the Company's intention to exercise its Repurchase Option with respect to all Shares to which such Repurchase Option applies. The Company, at its choice, may satisfy its payment obligation to Purchaser with respect to exercise of the Repurchase Option by either (A) delivering a check to Purchaser in the amount of the purchase price for the Shares being repurchased, or (B) in the event Purchaser is indebted to the Company, canceling an amount of such indebtedness equal to the purchase price for the Shares being repurchased, or (C) by a combination of (A) and (B) so that the combined payment and cancellation of indebtedness equals such purchase price. In the event of any deemed automatic exercise of the Repurchase Option pursuant to this Section 3(a)(ii) in which Purchaser is indebted to the Company, such indebtedness equal to the purchase price of the Shares being repurchased shall be deemed automatically canceled as of the 90th day following termination of Purchaser's employment or consulting relationship unless the Company otherwise satisfies its payment obligations. As a result of any repurchase of Shares pursuant to this Section 3(a), the Company shall become the legal and beneficial owner of the Shares being repurchased and shall have all rights and interest therein or related thereto, and the Company shall have the right to transfer to its own name the number of Shares being repurchased by the Company, without further action by Purchaser.

(iii) One hundred percent (100%) of the Shares shall initially be subject to the Repurchase Option. The Unvested Shares shall be released from the Repurchase Option in accordance with the Vesting Schedule set forth in the Notice of Stock Option Grant until all Shares are released from the Repurchase Option. Fractional shares shall be rounded to the nearest whole share.

(b) **Right of First Refusal.** Before any Shares held by Purchaser or any transferee of Purchaser (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 3(b) (the "Right of First Refusal").

(i) **Notice of Proposed Transfer.** The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the terms and conditions of each proposed sale or transfer. The Holder shall offer the Shares at the same price (the "Offered Price") and upon the same terms (or terms as similar as reasonably possible) to the Company or its assignee(s).

(ii) **Exercise of Right of First Refusal.** At any time within 30 days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (iii) below.

(iii) **Purchase Price.** The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 3(b) shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(iv) **Payment.** Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness, or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(v) **Holder's Right to Transfer.** If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 3(b), then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 60 days after the date of the Notice and provided further that any such sale or other transfer is effected in accordance with any applicable securities laws and the Proposed Transferee agrees in writing that the provisions of this Section 3 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, or if

the Holder proposes to change the price or other terms to make them more favorable to the Proposed Transferee, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(vi) **Exception for Certain Family Transfers.** Anything to the contrary contained in this Section 3(b) notwithstanding, the transfer of any or all of the Shares during Purchaser's lifetime or on Purchaser's death by will or intestacy to Purchaser's Immediate Family or a trust for the benefit of Purchaser's Immediate Family shall be exempt from the provisions of this Section 3(b). "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 3.

(c) **Involuntary Transfer.**

(i) **Company's Right to Purchase upon Involuntary Transfer.** In the event, at any time after the date of this Agreement, of any transfer by operation of law or other involuntary transfer (including death or divorce, but excluding a transfer to Immediate Family as set forth in Section 3(b)(vi) above) of all or a portion of the Shares by the record holder thereof, the Company shall have an option to purchase all of the Shares transferred at the greater of the purchase price paid by Purchaser pursuant to this Agreement or the Fair Market Value of the Shares on the date of transfer. Upon such a transfer, the person acquiring the Shares shall promptly notify the Secretary of the Company of such transfer. The right to purchase such Shares shall be provided to the Company for a period of thirty (30) days following receipt by the Company of written notice by the person acquiring the Shares.

(ii) **Price for Involuntary Transfer.** With respect to any stock to be transferred pursuant to Section 3(c)(i), the price per Share shall be a price set by the Board of Directors of the Company that will reflect the current value of the stock in terms of present earnings and future prospects of the Company. The Company shall notify Purchaser or his or her executor of the price so determined within thirty (30) days after receipt by it of written notice of the transfer or proposed transfer of Shares. However, if the Purchaser does not agree with the valuation as determined by the Board of Directors of the Company, the Purchaser shall be entitled to have the valuation determined by an independent appraiser to be mutually agreed upon by the Company and the Purchaser and whose fees shall be borne equally by the Company and the Purchaser.

(d) **Assignment.** The right of the Company to purchase any part of the Shares may be assigned in whole or in part to any shareholder or shareholders of the Company or other persons or organizations.

(e) **Restrictions Binding on Transferees.** All transferees of Shares or any interest therein will receive and hold such Shares or interest subject to the provisions of this Agreement, including, insofar as applicable, the Repurchase Option. In the event of any

purchase by the Company hereunder where the Shares or interest are held by a transferee, the transferee shall be obligated, if requested by the Company, to transfer the Shares or interest to the Purchaser for consideration equal to the amount to be paid by the Company hereunder. In the event the Repurchase Option is deemed exercised by the Company pursuant to Section 3(a)(ii) hereof, the Company may deem any transferee to have transferred the Shares or interest to Purchaser prior to their purchase by the Company, and payment of the purchase price by the Company to such transferee shall be deemed to satisfy Purchaser's obligation to pay such transferee for such Shares or interest, and also to satisfy the Company's obligation to pay Purchaser for such Shares or interest. Any sale or transfer of the Shares shall be void unless the provisions of this Agreement are satisfied.

(f) **Termination of Rights.** The right of first refusal granted the Company by Section 3(b) above and the option to repurchase the Shares in the event of an involuntary transfer granted the Company by Section 3(c) above shall terminate upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act").

4. **Escrow of Unvested Shares.** For purposes of facilitating the enforcement of the provisions of Section 3 above, Purchaser agrees, immediately upon receipt of the certificate(s) for the Shares subject to the Repurchase Option, to deliver such certificate(s), together with an Assignment Separate from Certificate in the form attached to this Agreement as Attachment A executed by Purchaser and by Purchaser's spouse (if required for transfer), in blank, to the Secretary of the Company, or the Secretary's designee, to hold such certificate(s) and Assignment Separate from Certificate in escrow and to take all such actions and to effectuate all such transfers and/or releases as are in accordance with the terms of this Agreement. Purchaser hereby acknowledges that the Secretary of the Company, or the Secretary's designee, is so appointed as the escrow holder with the foregoing authorities as a material inducement to make this Agreement and that said appointment is coupled with an interest and is accordingly irrevocable. Purchaser agrees that said escrow holder shall not be liable to any party hereof (or to any other party). The escrow holder may rely upon any letter, notice or other document executed by any signature purported to be genuine and may resign at any time. Purchaser agrees that if the Secretary of the Company, or the Secretary's designee, resigns as escrow holder for any or no reason, the Board of Directors of the Company shall have the power to appoint a successor to serve as escrow holder pursuant to the terms of this Agreement.

5. **Investment and Taxation Representations.** In connection with the purchase of the Shares, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. Purchaser is purchasing these securities for investment for his or her own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act or under any applicable

provision of state law. Purchaser does not have any present intention to transfer the Shares to any person or entity.

(b) Purchaser understands that the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the securities. Purchaser understands that the certificate(s) evidencing the securities will be imprinted with a legend which prohibits the transfer of the securities unless they are registered or such registration is not required in the opinion of counsel for the Company.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer of the securities (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Purchaser understands that the Company provides no assurances as to whether he or she will be able to resell any or all of the Shares pursuant to Rule 144 or Rule 701, which rules require, among other things, that the Company be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, that resales of securities take place only after the holder of the Shares has held the Shares for certain specified time periods, and under certain circumstances, that resales of securities be limited in volume and take place only pursuant to brokered transactions. Notwithstanding this paragraph (d), Purchaser acknowledges and agrees to the restrictions set forth in paragraph (e) below.

(e) Purchaser further understands that in the event all of the applicable requirements of Rule 144 or 701 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

(f) Purchaser understands that Purchaser may suffer adverse tax consequences as a result of Purchaser's purchase or disposition of the Shares. Purchaser represents that Purchaser has consulted any tax consultants Purchaser deems advisable in connection with the purchase or disposition of the Shares and that Purchaser is not relying on the Company for any tax advice.

6. **Restrictive Legends and Stop-Transfer Orders.**

(a) **Legends.** The certificate or certificates representing the Shares shall bear the following legends (as well as any legends required by applicable state and federal corporate and securities laws):

(i) THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

(ii) THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE SHAREHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

(b) **Stop-Transfer Notices.** Purchaser agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) **Refusal to Transfer.** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

7. **No Employment Rights.** Nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company, or a parent or subsidiary of the Company, to terminate Purchaser's employment or consulting relationship, for any reason, with or without cause.

8. **Section 83(b) Election.** Purchaser understands that Section 83(a) of the Internal Revenue Code of 1986, as amended (the "Code"), taxes as ordinary income for a Nonstatutory Stock Option and as alternative minimum taxable income for an Incentive Stock Option the difference between the amount paid for the Shares and the Fair Market Value of the Shares as of the date any restrictions on the Shares lapse. In this context, "restriction" means the right of the

Company to buy back the Shares pursuant to the Repurchase Option set forth in Section 3(a) of this Agreement. Purchaser understands that Purchaser may elect to be taxed at the time the Shares are purchased, rather than when and as the Repurchase Option expires, by filing an election under Section 83(b) (an "83(b) Election") of the Code with the Internal Revenue Service within 30 days from the date of purchase. Even if the Fair Market Value of the Shares at the time of the execution of this Agreement equals the amount paid for the Shares, the election must be made to avoid income and alternative minimum tax treatment under Section 83(a) in the future. Purchaser understands that failure to file such an election in a timely manner may result in adverse tax consequences for Purchaser. Purchaser further understands that an additional copy of such election form should be filed with his or her federal income tax return for the calendar year in which the date of this Agreement falls. Purchaser acknowledges that the foregoing is only a summary of the effect of United States federal income taxation with respect to purchase of the Shares hereunder, and does not purport to be complete. Purchaser further acknowledges that the Company has directed Purchaser to seek independent advice regarding the applicable provisions of the Code, the income tax laws of any municipality, state or foreign country in which Purchaser may reside, and the tax consequences of Purchaser's death.

Purchaser agrees that he or she will execute and deliver to the Company with this executed Agreement a copy of the Acknowledgment and Statement of Decision Regarding Section 83(b) Election (the "Acknowledgment") attached hereto as Attachment B. Purchaser further agrees that he or she will execute and submit with the Acknowledgment a copy of the 83(b) Election attached hereto as Attachment C (for tax purposes in connection with the early exercise of an option) if Purchaser has indicated in the Acknowledgment his or her decision to make such an election.

9. **Lock-Up Agreement.** In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Purchaser agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however or whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed 180 days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering.

10. **Miscellaneous.**

(a) **Governing Law.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) **Entire Agreement; Enforcement of Rights.** This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions between them. No modification of or amendment to this Agreement,

nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(d) **Construction.** This Agreement is the result of negotiations between and has been reviewed by each of the parties hereto and their respective counsel, if any; accordingly, this Agreement shall be deemed to be the product of all of the parties hereto, and no ambiguity shall be construed in favor of or against any one of the parties hereto.

(e) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or 48 hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(f) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(g) **Successors and Assigns.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Purchaser under this Agreement may only be assigned with the prior written consent of the Company.

(h) **California Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.**

[*Signature Page Follows*]

The parties have executed this Early Exercise Notice and Restricted Stock Purchase Agreement as of the date first set forth above.

COMPANY:

PULMONX CORPORATION

By: _____

Glen French
President and CEO

Address:
700 Chesapeake Drive
Redwood City, CA 94063

PURCHASER:

_____

_____
(signature)

Address:

_____

_____

I, _____, spouse of _____, have read and hereby approve the foregoing Agreement. In consideration of the Company's granting my spouse the right to purchase the Shares as set forth in the Agreement, I hereby agree to be bound irrevocably by the Agreement and further agree that any community property or other such interest that I may have in the Shares shall hereby be similarly bound by the Agreement. I hereby appoint my spouse as my attorney-in-fact with respect to any amendment or exercise of any rights under the Agreement.

_____
Spouse of

_____

ATTACHMENT A

ASSIGNMENT SEPARATE FROM CERTIFICATE

FOR VALUE RECEIVED and pursuant to that certain Early Exercise Notice and Restricted Stock Purchase Agreement between the undersigned, _____, ("Purchaser") and Pulmonx Corporation (the "Company") dated _____ ___, ____ (the "Agreement"), Purchaser hereby sells, assigns and transfers unto the Company _____ (_____) shares of the Common Stock of the Company, standing in Purchaser's name on the books of the Company and represented by Certificate No. ____, and does hereby irrevocably constitute and appoint _____ to transfer said stock on the books of the Company with full power of substitution in the premises. THIS ASSIGNMENT MAY ONLY BE USED AS AUTHORIZED BY THE AGREEMENT AND THE ATTACHMENTS THERETO.

Dated: _____

Signature:

_____

«Optionee»

_____

Spouse of «Optionee» (if applicable)

Instruction: Please do not fill in any blanks other than the signature line. The purpose of this assignment is to enable the Company to exercise its Repurchase Option set forth in the Agreement without requiring additional signatures on the part of Purchaser.

ATTACHMENT B

ACKNOWLEDGMENT AND STATEMENT OF DECISION
REGARDING SECTION 83(b) ELECTION

The undersigned (which term includes the undersigned's spouse), a purchaser of _____ shares of Common Stock of Pulmonx Corporation, a Delaware corporation (the "Company") by exercise of an option (the "Option") granted pursuant to the Company's 2010 Stock Plan (the "Plan"), hereby states as follows:

1. The undersigned acknowledges receipt of a copy of the Plan relating to the offering of such shares. The undersigned has carefully reviewed the Plan and the option agreement pursuant to which the Option was granted.

2. The undersigned either [check and complete as applicable]:

(a) ____ has consulted, and has been fully advised by, the undersigned's own tax advisor, _____, whose business address is _____, regarding the federal, state and local tax consequences of purchasing shares under the Plan, and particularly regarding the advisability of making elections pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended (the "Code") and pursuant to the corresponding provisions, if any, of applicable state law; or

(b) ____ has knowingly chosen not to consult such a tax advisor.

3. The undersigned hereby states that the undersigned has decided [check as applicable]:

(a) ____ to make an election pursuant to Section 83(b) of the Code, and is submitting to the Company, together with the undersigned's executed Early Exercise Notice and Restricted Stock Purchase Agreement, an executed form entitled "Election Under Section 83(b) of the Internal Revenue Code of 1986;" or

(b) ____ not to make an election pursuant to Section 83(b) of the Code.

4. Neither the Company nor any subsidiary or representative of the Company has made any warranty or representation to the undersigned with respect to the tax consequences of the undersigned's purchase of shares under the Plan or of the making or failure to make an election pursuant to Section 83(b) of the Code or the corresponding provisions, if any, of applicable state law.

Date: _____ _____
«Optionee»

Date: _____ _____
Spouse of «Optionee»

ATTACHMENT C

ELECTION UNDER SECTION 83(b)
OF THE INTERNAL REVENUE CODE OF 1986

The undersigned taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code, to include in taxpayer's gross income or alternative minimum taxable income, as applicable, for the current taxable year, the amount of any income that may be taxable to taxpayer in connection with taxpayer's receipt of the property described below:

1. The name, address, taxpayer identification number and taxable year of the undersigned are as follows:

   NAME OF TAXPAYER: _____

   NAME OF SPOUSE: _____

   ADDRESS: _____

   _____

   IDENTIFICATION NO. OF TAXPAYER: _____

   IDENTIFICATION NO. OF SPOUSE: _____

   TAXABLE YEAR: _____

2. The property with respect to which the election is made is described as follows:

   _____ shares of the Common Stock of Pulmonx Corporation, a Delaware corporation (the "Company").

3. The date on which the property was transferred is: _____.

4. The property is subject to the following restrictions:

   Repurchase option at cost in favor of the Company upon termination of taxpayer's employment or consulting relationship.

5. The fair market value at the time of transfer, determined without regard to any restriction other than a restriction which by its terms will never lapse, of such property is: $_____.

6. The amount (if any) paid for such property: $_____.

The undersigned has submitted a copy of this statement to the person for whom the services were performed in connection with the undersigned's receipt of the above-described property. The transferee of such property is the person performing the services in connection with the transfer of said property. The undersigned understands that the foregoing election may not be revoked except with the consent of the Commissioner.

Dated: _____ _____

Dated: _____ _____

Spouse of _____

RECEIPT AND CONSENT

The undersigned hereby acknowledges receipt of a photocopy of Certificate No. CS- ____ for _____ shares of Common Stock of Pulmonx Corporation (the "Company").

The undersigned further acknowledges that the Secretary of the Company, or his or her designee, is acting as escrow holder pursuant to the Early Exercise Notice and Restricted Stock Purchase Agreement Purchaser has previously entered into with the Company. As escrow holder, the Secretary of the Company, or his or her designee, holds the original of the aforementioned certificate issued in the undersigned's name.

Dated: _____

«Optionee»

_____

(signature)

EXHIBIT B

PULMONX CORPORATION

2010 Stock Plan

EXERCISE NOTICE AND RESTRICTED STOCK PURCHASE AGREEMENT

This Agreement ("Agreement") is made as of _____, by and between Pulmonx Corporation, a Delaware corporation (the "Company"), and _____ ("Purchaser"). To the extent any capitalized terms used in this Agreement are not defined, they shall have the meaning ascribed to them in the 2010 Stock Plan.

1. **Exercise of Option.** Subject to the terms and conditions hereof, Purchaser hereby elects to exercise his or her option to purchase _____ shares of the Common Stock (the "Shares") of the Company under and pursuant to the Company's 2010 Stock Plan (the "Plan") and the Notice of Stock Option Grant and Stock Option Agreement dated _____, (the "Option Agreement"). The purchase price for the Shares shall be $_____ per Share for a total purchase price of $_____. The term "Shares" refers to the purchased Shares and all securities received in replacement of the Shares or as stock dividends or splits, all securities received in replacement of the Shares in a recapitalization, merger, reorganization, exchange or the like, and all new, substituted or additional securities or other properties to which Purchaser is entitled by reason of Purchaser's ownership of the Shares.

2. **Time and Place of Exercise.** The purchase and sale of the Shares under this Agreement shall occur at the principal office of the Company simultaneously with the execution and delivery of this Agreement in accordance with the provisions of Section 3(b) of the Option Agreement. On such date, the Company will deliver to Purchaser a certificate representing the Shares to be purchased by Purchaser (which shall be issued in Purchaser's name) against payment of the exercise price therefor by Purchaser by (a) check made payable to the Company, (b) cancellation of indebtedness of the Company to Purchaser, (c) delivery of shares of the Common Stock of the Company in accordance with Section 4 of the Option Agreement or (d) by a combination of the foregoing.

3. **Limitations on Transfer.** In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not assign, encumber or dispose of any interest in the Shares except in compliance with the provisions below and applicable securities laws.

(a) **Right of First Refusal.** Before any Shares held by Purchaser or any transferee of Purchaser (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 3(a) (the "Right of First Refusal").

(i) **Notice of Proposed Transfer.** The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the terms and conditions of each proposed sale or transfer. The Holder shall offer the Shares at the same price (the "Offered Price") and upon the same terms (or terms as similar as reasonably possible) to the Company or its assignee(s).

(ii) **Exercise of Right of First Refusal.** At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (iii) below.

(iii) **Purchase Price.** The purchase price ("Purchase Price") for the Shares purchased by the Company or its assignee(s) under this Section 3(a) shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(iv) **Payment.** Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness, or by any combination thereof within 30 days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(v) **Holder's Right to Transfer.** If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 3(a), then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, provided that such sale or other transfer is consummated within 60 days after the date of the Notice and provided further that any such sale or other transfer is effected in accordance with any applicable securities laws and the Proposed Transferee agrees in writing that the provisions of this Section 3 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, or if the Holder proposes to change the price or other terms to make them more favorable to the Proposed Transferee, a new Notice shall be given to the Company, and the Company and/or its

assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(vi) **Exception for Certain Family Transfers.** Anything to the contrary contained in this Section 3(a) notwithstanding, the transfer of any or all of the Shares during Purchaser's lifetime or on Purchaser's death by will or intestacy to Purchaser's Immediate Family or a trust for the benefit of Purchaser's Immediate Family shall be exempt from the provisions of this Section 3(a). "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 3.

(b) **Involuntary Transfer.**

(i) **Company's Right to Purchase upon Involuntary Transfer.** In the event, at any time after the date of this Agreement, of any transfer by operation of law or other involuntary transfer (including death or divorce, but excluding a transfer to Immediate Family as set forth in Section 3(a)(vi) above) of all or a portion of the Shares by the record holder thereof, the Company shall have an option to purchase all of the Shares transferred at the greater of the purchase price paid by Purchaser pursuant to this Agreement or the fair market value of the Shares on the date of transfer. Upon such a transfer, the person acquiring the Shares shall promptly notify the Secretary of the Company of such transfer. The right to purchase such Shares shall be provided to the Company for a period of thirty (30) days following receipt by the Company of written notice by the person acquiring the Shares.

(ii) **Price for Involuntary Transfer.** With respect to any stock to be transferred pursuant to Section 3(b)(i), the price per Share shall be a price set by the Board of Directors of the Company that will reflect the current value of the stock in terms of present earnings and future prospects of the Company. The Company shall notify Purchaser or his or her executor of the price so determined within thirty (30) days after receipt by it of written notice of the transfer or proposed transfer of Shares. However, if the Purchaser does not agree with the valuation as determined by the Board of Directors of the Company, the Purchaser shall be entitled to have the valuation determined by an independent appraiser to be mutually agreed upon by the Company and the Purchaser and whose fees shall be borne equally by the Company and the Purchaser.

(c) **Assignment.** The right of the Company to purchase any part of the Shares may be assigned in whole or in part to any shareholder or shareholders of the Company or other persons or organizations.

(d) **Restrictions Binding on Transferees.** All transferees of Shares or any interest therein will receive and hold such Shares or interest subject to the provisions of this Agreement. Any sale or transfer of the Company's Shares shall be void unless the provisions of this Agreement are satisfied.

(e) **Termination of Rights.** The right of first refusal granted the Company by Section 3(a) above and the option to repurchase the Shares in the event of an involuntary transfer granted the Company by Section 3(b) above shall terminate upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"). Upon termination of the right of first refusal described in Section 3(b) above, a new certificate or certificates representing the Shares not repurchased shall be issued, on request, without the legend referred to in Section 5(a)(ii) herein and delivered to Purchaser.

4. **Investment and Taxation Representations.** In connection with the purchase of the Shares, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. Purchaser is purchasing these securities for investment for his or her own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act or under any applicable provision of state law. Purchaser does not have any present intention to transfer the Shares to any person or entity.

(b) Purchaser understands that the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the securities. Purchaser understands that the certificate(s) evidencing the securities will be imprinted with a legend which prohibits the transfer of the securities unless they are registered or such registration is not required in the opinion of counsel for the Company.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer of the securities (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Purchaser understands that the Company provides no assurances as to whether he or she will be able to resell any or all of the Shares pursuant to Rule 144 or Rule 701, which rules require, among other things, that the Company be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, that resales of securities take place only after the holder of the Shares has held the Shares for certain specified time periods, and under certain circumstances, that resales of securities be limited in volume and take place only pursuant to brokered transactions. Notwithstanding this paragraph (d), Purchaser acknowledges and agrees to the restrictions set forth in paragraph (e) below.

(e) Purchaser further understands that in the event all of the applicable requirements of Rule 144 or 701 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

(f) Purchaser understands that Purchaser may suffer adverse tax consequences as a result of Purchaser's purchase or disposition of the Shares. Purchaser represents that Purchaser has consulted any tax consultants Purchaser deems advisable in connection with the purchase or disposition of the Shares and that Purchaser is not relying on the Company for any tax advice.

5. **Restrictive Legends and Stop-Transfer Orders.**

(a) **Legends.** The certificate or certificates representing the Shares shall bear the following legends (as well as any legends required by applicable state and federal corporate and securities laws):

(i) THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

(ii) THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE SHAREHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

(b) **Stop-Transfer Notices.** Purchaser agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) **Refusal to Transfer.** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

6. **No Employment Rights.** Nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company, or a parent or subsidiary of the Company, to terminate Purchaser's employment or consulting relationship, for any reason, with or without cause.

7. **Lock-Up Agreement.** In connection with the initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Purchaser agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however or whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, for such period of time (not to exceed 180 days) from the effective date of such registration as may be requested by the Company or such managing underwriters and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering.

8. **Miscellaneous.**

(a) **Governing Law.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of California, without giving effect to principles of conflicts of law.

(b) **Entire Agreement; Enforcement of Rights.** This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions between them. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(d) **Construction.** This Agreement is the result of negotiations between and has been reviewed by each of the parties hereto and their respective counsel, if any; accordingly,

this Agreement shall be deemed to be the product of all of the parties hereto, and no ambiguity shall be construed in favor of or against any one of the parties hereto.

(e) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(f) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(g) **Successors and Assigns.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Purchaser under this Agreement may only be assigned with the prior written consent of the Company.

(h) **California Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.**

[Signature Page Follows]

The parties have executed this Exercise Notice and Restricted Stock Purchase Agreement as of the date first set forth above.

COMPANY:

PULMONX CORPORATION

By: _____

Glen French
President and CEO

Address:
700 Chesapeake Drive
Redwood City, CA 94063

PURCHASER:

_____

_____
(signature)

Address:

I, _____, spouse of , have read and hereby approve the foregoing Agreement. In consideration of the Company's granting my spouse the right to purchase the Shares as set forth in the Agreement, I hereby agree to be irrevocably bound by the Agreement and further agree that any community property or other such interest shall hereby by similarly bound by the Agreement. I hereby appoint my spouse as my attorney-in-fact with respect to any amendment or exercise of any rights under the Agreement.

_____
Spouse of

_____

RECEIPT

The undersigned hereby acknowledges receipt of Certificate No. CS-_____ for _____ shares of Common Stock of Pulmonx Corporation.

Dated: _____

_____

_____
(signature)

RECEIPT

Pulmonx Corporation (the "Company") hereby acknowledges receipt of (check as applicable):

_____ A check in the amount of $_____.

_____ The cancellation of indebtedness in the amount of $_____.

_____ Certificate No. CS-____ representing _____ shares of the Company's Common Stock with a fair market value of $_____.

given by _____ as consideration for Certificate No. CS-____ for _____ shares of Common Stock of the Company.

Dated: _____

PULMONX CORPORATION

By: _____

Glen French
President and CEO

PULMONX CORPORATION

EXECUTIVE EMPLOYMENT AGREEMENT

This Executive Employment Agreement (the "Agreement") is made and entered into effective as of December 10, 2014 (the "Effective Date") by and between Glendon E. French ("Executive") and Pulmonx Corporation, a Delaware corporation (the "Company").

1. **Term of Agreement.** This Agreement shall commence on the Effective Date and shall continue in effect until terminated by either party, with or without cause, on 30 days' written notice to the other party.

2. **Duties.**

(a) **Position.** Executive shall be employed as the Company's President and Chief Executive Officer and will report to the Company's Board of Directors (the "Board"). Executive will be elected as a member of the Board.

(b) **Obligations to the Company.** Executive agrees to the best of his ability and experience that he will at all times loyally and conscientiously perform all of the duties and obligations required of and from Executive pursuant to the express and implicit terms hereof, and to the reasonable satisfaction of the Company. During the term of Executive's employment relationship with the Company, Executive shall devote substantially all of his business time to the affairs of the Company and further agrees that he will devote a minimum of forty (40) hours per week to the business of the Company and the Company will be entitled to all of the benefits and profits arising from or incident to all such work services and advice, and Executive will not directly or indirectly engage or participate in any business that is competitive in any manner with the business of the Company. Nothing in this Agreement shall prevent Executive from (i) serving on the board of directors of another corporation; provided that serving on any more than two corporate boards commencing six months after the Effective Date will require the prior approval of the Board; (ii) owning equity interests of any corporation or limited liability company whose stock is listed on a national stock exchange or the Nasdaq Global Market and whose business is not competitive with the Company; or (iii) accepting speaking or presentation engagements in exchange for honoraria or serving on boards of charitable organizations. Executive will comply with and be bound by the Company's operating policies, procedures and practices from time to time in effect during the term of Executive's employment.

3. **At-Will Employment.** The Company and Executive acknowledge that Executive's employment is and shall continue to be at-will, as defined under applicable law, and that Executive's employment with the Company may be terminated by either party at any time for any or no reason. If Executive's employment terminates for any reason, Executive shall not be entitled to any payments, benefits, damages, award or compensation other than as provided in this Agreement. The rights and duties created by this Section 3 may not be modified in any way except by a written agreement executed by the Board.

4. **Compensation.** For the duties and services to be performed by Executive hereunder, the Company shall pay Executive, and Executive agrees to accept, the salary, stock options and other benefits described below in this Section 4.

(a) **Salary.** Executive shall receive a yearly salary of $375,000. Executive's salary shall be payable in accordance with the Company's standard payroll policies. Executive's salary shall be reviewed on at least an annual basis.

(b) **Stock Options and Other Incentive Programs.** Subject to approval of the Board and the amendment of the Company's 2010 Stock Plan (the "Plan") to authorize an additional 11,618,296 shares under the Plan, the Company will grant Executive (i) an option to purchase 7,094,554 shares of Common Stock of the Company, which will equal approximately 5.5% of the fully diluted capitalization of the Company (the "5.5% Option") and (ii) an option to purchase 644,960 shares of Common Stock of the Company, which will equal approximately 0.5% of the fully diluted capitalization of the Company (the "0.5% Option" and with the 5.5% Option, the "First Options"). Following the closing of the Company's next preferred stock financing (the "Financing") and subject to approval of the Board, the Company will grant Executive (i) an option to purchase the number of shares of Common Stock of the Company, which together with the shares subject to the 5.5% Option, will equal approximately 5.5% of the fully diluted capitalization of the Company (the "Second 5.5% Option") immediately following the Financing and (ii) an option to purchase the number of shares of Common Stock of the Company, which together with the shares subject to the 0.5% Option, will equal approximately 0.5% of the fully diluted capitalization of the Company (the "Second 0.5% Option") immediately following the Financing (collectively, the "Second Options"); provided that the anti-dilution protection for the Second Options will only apply with respect to the first $30 million raised in the Financing to the extent the Financing exceeds $30 million. Each of the First Options and Second Options will be issued at an exercise price equal to the fair market value per share of Common Stock on the date of grant pursuant to the Plan. The 5.5% Option and the Second 5.5% Option will vest as follows: 12/48th of the shares shall vest on the twelve-month anniversary of the Effective Date and 1/48th of the shares shall vest on the same date of each month thereafter. The 0.5% Option and the Second 0.5% Option will vest upon action of the Board or a Change of Control that represents an enterprise value for the Company that is at least $500 million. The options will be an incentive stock option to the maximum extent allowed by the tax code and will be subject to the terms of the Plan and the Stock Option Agreement between Executive and the Company. Executive shall be eligible to receive such additional stock options or other equity incentives as may be determined by the Board.

(c) **Additional Benefits.** Executive will be eligible to participate in the Company's employee benefit plans of general application, including without limitation, those plans covering medical, disability and life insurance and a 401 (k) plan, to the extent any such plans are available to officers or employees of the Company and in accordance with the rules established for individual participation in any such plan and under applicable law. Executive will be eligible for paid time off ("PTO") leave in accordance with the policies in effect during the term of this Agreement, which will be 20 days per year, and will receive such other benefits as the Company generally provides to its other employees of comparable position and experience.

(d) **Bonus.** Executive shall be entitled to participate in any bonus plan that may be adopted by the Company. With respect to calendar year 2015 and subsequent calendar years, Executive shall be eligible for a cash bonus in an amount equal to up to 40% of Executive's yearly salary upon the successful completion of specified milestones to be mutually agreed upon between Executive and the Board. The bonus plan with respect to calendar year 2015 will be completed and approved by February 17, 2015.

(e) **Reimbursement of Expenses.** Executive shall be authorized to incur on behalf and for the benefit of, and shall be reimbursed by, the Company for reasonable expenses, provided that such expenses are substantiated in accordance with Company policies.

5. **Termination of Employment and Severance Benefits.**

(a) **Termination of Employment.** This Agreement may be terminated upon the occurrence of any of the following events:

(i) The Company's determination in good faith that it is terminating Executive for Cause (as defined in Section 6 below);

(ii) The date of Executive's Involuntary Termination (as defined in Section 6 below); or

(iii) The effective date of a written notice, which effective date shall be no less than 30 days following such notice, sent to the Company from Executive stating that Executive is electing to terminate his employment with the Company ("Voluntary Termination").

(b) **Severance Benefits.**

(i) Voluntary Termination. If Executive's employment terminates by Voluntary Termination, then Executive shall not be entitled to receive payment of any severance benefits. Executive will receive payment(s) for all salary and PTO accrued as of the date of Executive's termination of employment and Executive's benefits will be continued under the Company's then existing benefit plans and policies in accordance with, and as and if permitted by such plans and policies in effect on the date of termination and in accordance with applicable law.

(ii) Involuntary Termination. If at any time, Executive's employment terminates as a result of an Involuntary Termination, then, subject to compliance with Sections 5(b)(v) and 8 below, Executive will receive the following:

(A) Continuing payments of severance pay (less applicable withholding taxes) at a rate equal to Executive's base salary rate (as in effect immediately prior to Executive's termination), for 12 months from the date of such termination of employment; and

(B) If Executive elects to continue his medical coverage under Title X of the Consolidated Budget Reconciliation Act of 1985 ("COBRA"), the Company will reimburse the cost of COBRA coverage for Executive and Executive's eligible dependents for 12 months following the date of Executive's termination of employment with the Company (or if earlier, until Executive ceases to be eligible for COBRA).

(C) Acceleration of Vesting. If Executive's employment terminates as a result of an Involuntary Termination that occurs within one (1) month before or twelve (12) months after a Change of Control, 100% of the shares of Common Stock of the Company subject to any stock options held by Executive shall accelerate and become fully vested; provided that the 0.5% Option and the Second 0.5% Option shall only accelerate and become fully vested upon action of the Board or in the event that the Change of Control represents an enterprise value for the Company that is at least $500 million.

(iii) Termination for Cause. If Executive's employment is terminated for Cause, then Executive shall not be entitled to receive payment of any severance benefits. Executive will receive payment(s) for all salary and PTO accrued as of the date of Executive's termination of employment and Executive's benefits will be continued under the Company's then existing benefit plans and policies in

accordance with, and as and if permitted by such plans and policies in effect on the date of termination and in accordance with applicable law.

(iv) Termination by Reason of Death or Disability. If Executive's employment terminates as a result of Executive's death or Disability, then Executive shall not be entitled to receive payment of any severance benefits. Executive or his estate or representative will receive payment(s) for all salary and PTO accrued as of the date of Executive's death or Disability and any other benefits payable under the Company's then existing benefit plans and policies in accordance with, and as and if permitted by such plans and policies in effect on the date of death or Disability and in accordance with applicable law.

(v) Release of Claims Agreement. The receipt of any severance pay or other benefits pursuant to Subsection 5(b) will be subject to Executive signing and not revoking a release of claims agreement with the Company in a form provided by the Company, and returning the release of claims agreement to the Company within the time frame set forth in the release of claims agreement (which time frame shall be consistent with the requirements of applicable law and the time frame required to ensure that the severance pay is exempt from the requirements of Section 409A (as defined below)). The release of claims agreement required for severance pay or other benefits pursuant to Subsection 5(b) creates legally binding obligations on the part of Executive and the Company therefore advises Executive to seek the advice of an attorney before signing it.

(vi) Timing of Severance Payments. Severance pay pursuant to Subsection 5(b) will be paid, if at all, in accordance with the normal payroll practices of the Company in effect immediately prior to the Change of Control, with the first payment being paid on the Company's next regular payday following the effective date of the release of claims agreement, in an amount retroactive to the date Executive's employment terminated. If Executive should die before all amounts have been paid, such unpaid amounts will be paid in a lump-sum payment (less any withholding taxes) to Executive's designated beneficiary, if living, or otherwise to the personal representative of Executive's estate within the time frame that is consistent with the short-term deferral exception to Section 409A (as defined below).

(vii) Restricted Activities. Executive agrees, to the extent permitted by applicable law, that in the event Executive receives severance pay or other benefits pursuant to Subsection 5(b) above, for the 12 consecutive month period immediately following the date of Executive's termination, Executive, as a condition to receipt of severance pay and benefits under Subsection 5(b), will not (i) either directly or indirectly, solicit, induce, recruit, or encourage any employee of the Company to leave his employment either for Executive or for any other entity or person, or (ii) without the express written consent of the Company, directly or indirectly engage in, enter the employ, have any ownership interest in, or participate in any entity that as of the date of Involuntary Termination, engages in the design, development, manufacture, production, marketing, sale or servicing of any product or the provision of any service that competes with any service offered by the Company or any product sold by the Company or under development by the Company; provided, however, that ownership of less than 0.5% of the outstanding stock of any publicly traded corporation will not be deemed to be violative of the restrictive covenant set forth in this paragraph.

The covenants contained in this Subsection 5(b)(vii) shall be construed as a series of separate covenants, one for each country, province, state, city or other political subdivision in which the Company currently engages in its business or, during the term of this Agreement, becomes engaged in its business. Except for geographic coverage, each such separate covenant shall be deemed identical in terms to the covenant contained in this Subsection 5(b)(vii). If, in any judicial proceeding, a court refuses to enforce any of such

separate covenants (or any part thereof), then such unenforceable covenant (or such part) shall be eliminated from this Agreement to the extent necessary to permit the remaining separate covenants (or portions thereof) to be enforced. In the event that the provisions of this Subsection 5(b)(vii) are deemed to exceed the time, geographic or scope limitations permitted by applicable law, then such provisions shall be reformed to the maximum time, geographic or scope limitations, as the case may be, permitted by applicable law.

(viii) Exclusive Remedy. In the event of a termination of Executive's employment with the Company (or any parent or subsidiary of the Company), the provisions of this Section 5 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement. Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Section 5.

(ix) Section 409A.

(A) Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended and any final regulations and guidance promulgated thereunder ("Section 409A") at the time of Executive's termination (other than due to death), then the severance payable to Executive, if any, pursuant to this Agreement, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "Deferred Compensation Separation Benefits"), that are payable within the first 6 months following Executive's termination of employment will become payable on the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Executive's termination of employment. All subsequent Deferred Compensation Separation Benefits, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Executive dies following his termination but prior to the six (6) month anniversary of his termination, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Executive's death and all other Deferred Compensation Separation Benefits will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment payable under this Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(B) Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Compensation Separation Benefits for purposes of Subsection (A) above.

(C) Any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1 (b)(9)(iii) of the Treasury Regulations that do not exceed the Section 409A Limit will not constitute Deferred Compensation Separation Benefits for purposes of Subsection (A) above.

It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. Executive and the Company agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

(c) **Limitation on Payments.** In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) but for this Section 5(c), would be subject to the excise tax imposed by Section 4999 of the Code, then Executive's severance benefits under Subsection 5(c) will be payable either:

(i) in full; or

(ii) as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code;

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 5(c) will be made in writing by the Company's independent public accountants immediately prior to the Change of Control (the "Accountants"), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 5(c), the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company will bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 5(c). If a reduction in payments or benefits constituting "parachute payments" is necessary so that they do not constitute "parachute payments," reduction will occur in the following order: reduction of cash payments; reduction of employee benefits; cancellation of accelerated vesting of equity awards; cancellation of equity awards that are considered to be "contingent" upon the Change of Control transaction.

6. **Definitions.** The following terms referred to in this Agreement will have the following meanings:

(a) "Cause" for Executive's termination will exist at any time after the happening of one or more of the following events:

(i) Executive's engaging in any willful act of dishonesty, fraud or misrepresentation; (ii) Executive's violation of any material federal or state law or regulation applicable to the Company's business; (iii) Executive's breach of any confidentiality agreement or invention assignment agreement between Executive and the Company; or (iv) Executive being convicted of, or entering a plea of *nolo contendere* to, any felony

(b) "Change of Control" of the Company means: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation or stock transfer, but excluding any such transaction effected primarily for the purpose of changing the domicile of the Company), unless the Company's shareholders of record immediately prior to such transaction or series of related transactions hold, immediately after such transaction or series of related transactions, at least 50% of the voting power of the surviving or acquiring entity (provided that the sale by the Company of its securities for the purposes of raising additional

funds shall not constitute a Change in Control hereunder), or (ii) a sale of all or substantially all of the assets of the Company.

(c) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(d) "Involuntary Termination" means termination of Executive's employment under the following circumstances:

(i) termination without Cause by the Company; or

(ii) voluntary termination by Executive within 30 days following the occurrence of one or more of the following, without Executive's consent: (i) a significant reduction of Executive's duties, position, or responsibilities relative to those in effect immediately prior to such reduction; (ii) a reduction by the Company of greater than 10% of Executive's base salary in effect immediately prior to such reduction; or (iii) Executive's relocation to a facility or a location more than 30 miles from the current headquarters office location.

Notwithstanding the foregoing, an Involuntary Termination shall not be deemed to exist pursuant to clause (ii) unless, all of the following requirements have been satisfied: (1) Executive must provide notice to the Company of his intent to assert an Involuntary Termination pursuant to clause (ii) above, within 30 days of the initial existence of one or more of the conditions set forth in subclauses (A) through (C) of clause (ii) above; (2) the Company must fail within 30 days (the "Cure Period") from the date of such notice to remedy the conditions described in such notice; and (3) if such conditions are not remedied, Executive must resign within 20 days after the end of the Cure Period. If the Company remedies such conditions within the Cure Period, Executive may withdraw his proposed termination or may resign with no benefits (pursuant to a Voluntary Termination described in Section 5(b)(i)).

(e) "Section 409A Limit" means the lesser of two times: (i) Executive's annualized compensation based upon the annual rate of pay paid to Executive during the Company's taxable year preceding the Company's taxable year of Executive's termination of employment as determined under Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which Executive's employment is terminated.

7. **Confidentiality Agreement.** Executive shall sign, or has signed, a Confidential Information and Invention Assignment Agreement (the "Confidentiality Agreement") substantially in the form attached hereto as Exhibit A. Executive hereby represents and warrants to the Company that he or she has complied with all obligations under the Confidentiality Agreement and agrees to continue to abide by the terms of the Confidentiality Agreement and further agrees that the provisions of the Confidentiality Agreement shall survive any termination of this Agreement or of Executive's employment relationship with the Company.

8. **Conflicts and Authorization.** Executive represents that his or her performance of all the terms of this Agreement will not breach any other agreement to which Executive is a party. Executive has not, and will not during the term of this Agreement, enter into any oral or written agreement in conflict with any of the provisions of this Agreement. Executive further represents that he or she is entering into or has entered into an employment relationship with the Company of his or her own free will and that he or she has not been solicited as an employee in any way by the Company. The Company represents that this Agreement has been duly authorized by all appropriate corporate action and that there are no conditions to

its effectiveness, and that its performance of all the terms of this Agreement will not breach its charter, bylaws, or any other agreement to which the Company is a party. The Company has not, and will not during the term of this Agreement, enter into any oral or written agreement in conflict with any of the provisions of this Agreement.

9. **Successors.** Any successor to the Company (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agrees expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. The terms of this Agreement and all of Executive's rights hereunder shall inure to the benefit of, and be enforceable by, Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

10. **Miscellaneous Provisions.**

(a) **No Duty to Mitigate.** Executive shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking new employment or in any other manner), nor, except as otherwise provided in this Agreement, shall any such payment be reduced by any earnings that Executive may receive from any other source.

(b) **Amendments and Waivers.** Any term of this Agreement may be amended or waived only with the written consent of the parties.

(c) **Sole Agreement.** This Agreement, including any Exhibits hereto, constitutes the sole agreement of the parties and supersedes all oral negotiations and prior writings with respect to the subject matter hereof.

(d) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient upon receipt, when delivered personally or by a nationally-recognized delivery service (such as Federal Express or UPS), or 48 hours after being deposited in the U.S. mail as certified or registered mail with postage prepaid, if such notice is addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(e) **Choice of Law.** The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California, without giving effect to the principles of conflict of laws.

(f) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(g) **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

(h) **Arbitration.** Executive and the Company agree that any and all disputes arising out of, or relating to, the terms of this Agreement, their interpretation, and any of the matters herein, will be subject to binding arbitration in San Mateo County, California before the Judicial Arbitration & Mediation Services ("JAMS") pursuant to its employment arbitration rules & procedures ("JAMS Rules"). The arbitrator shall administer and conduct any arbitration in accordance with California law, including the California Code of Civil Procedure, and the arbitrator shall apply substantive and procedural California law to any dispute or claim, without reference to any conflict-of-law provisions of any jurisdiction. To the extent that the JAMS Rules conflict with California law, California law will take precedence. The Company and Executive agree that the prevailing party in any arbitration will be entitled to injunctive relief in any court of competent jurisdiction to enforce the arbitration award. The Company and Executive agree that the prevailing party in any arbitration will be awarded its reasonable attorneys' fees and costs. **The Company and Executive hereby agree to waive their right to have any dispute with the other party resolved in a court of law by a judge or jury.** This Section 10(h) will not prevent either party from seeking injunctive relief (or any other provisional remedy) from any court having jurisdiction over the parties and the subject matter of their dispute relating to Executive's obligations under this Agreement and the agreements incorporated herein by reference.

(i) **Advice of Counsel.** EACH PARTY TO THIS AGREEMENT ACKNOWLEDGES THAT, IN EXECUTING THIS AGREEMENT, SUCH PARTY HAS HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND HAS READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT SHALL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPARATION HEREOF.

[Signature Page Follows.]

The parties have executed this Agreement the date first written above.

PULMONX CORPORATION

By: /s/ Rodney Perkins

Rodney Perkins, M.D
Chairman of Board Directors

GLENDON E. FRENCH

By: /s/ Glendon E. French

Address: [Address Intentionally Omitted]

EXHIBIT A

CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT AGREEMENT

December 11, 2014

Geoffrey Beran Rose
[Address Intentionally Omitted]

Dear Beran:

On behalf of Pulmonx (the "Company"), I am pleased to offer you employment with the Company on the terms described below.

Position
You will start in a full-time, exempt position as Vice President, Marketing and Business Development reporting to the CEO.

Compensation
You will be paid an annual salary of $240,000.00. Your salary will be payable in two equal payments per month pursuant to Pulmonx's regular payroll policy (subject to normal required withholding). You will also be eligible to participate in the Company's cash bonus plan. The cash bonus plan is tied to performance objectives. The amount of the bonus is subject to approval by the Company's Board of Directors. Based on your position, you will be eligible to receive a bonus of approximately 25% of your annual salary. In addition, in order to receive a bonus you must be in good standing with the Company and employed at the time the bonus is distributed to be eligible for the bonus. Your base salary will be reviewed annually as part of the Company's normal salary review process.

Benefits
You will have the opportunity to participate in the standard benefit plans currently offered to other similarly situated employees, subject to eligibility requirements. These benefits include health insurance, paid time off, and a 401(k) plan. The effective date of your group health insurance will be the first of the month following your date of hire. Personal time off is accrued at the rate of 13.33 hours per month, which equates to 20 days per year.

Stock Options
In connection with the commencement of your employment and the amendment of the Company's 2010 Stock Plan (the "Plan") to authorize an additional 11,618,296 shares under the Plan, the Board of Directors of the Company will grant you a stock option ("First Option") to purchase 1,289,919 shares of Common Stock, which will equal approximately 1.0% of the fully diluted capitalization of the Company. Following the closing of the Company's next preferred

stock financing (the “Financing”) the Board of Directors will grant you a stock option (“Second Option”) to purchase the number of shares of Common Stock of the Company, which together with the shares subject to the First Option, will equal approximately 1% of the fully diluted capitalization of the Company immediately following the Financing. Each of the First Option and Second Option will be issued at an exercise price equal to the fair market value per share of Common Stock on the date of grant. The grants will be immediately exercisable and will vest 25% on your one-year anniversary, and then at a rate of 1/48th per month, with the options being fully vested after four (4) years from your date of hire. The option will be subject to the terms of Pulmonx’s 2010 Stock Plan and the Stock Option Agreement between you and Pulmonx. If you choose to early exercise your option, Pulmonx will have the right to repurchase any unvested shares in the event of termination of your employment relationship.

Confidential Information and Invention Assignment Agreement
Like all Pulmonx employees, you will be required, as a condition of your employment with the Company, to sign the Company’s standard Confidential Information and Invention Assignment Agreement (“Confidentiality Agreement”).

Employment Relationship
Employment with the Company is for no specific period of time. Your employment with the Company will be “at will,” meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer letter. This is the full and complete agreement between you and the Company. Although your job duties, title, compensation and benefits, as well as the Company’s personnel policies and procedures, may change from time to time, the “at will” nature of your employment may only be changed in an express written agreement signed by you and the Company’s President.

This offer is contingent upon successful completion of a background check. As we have not received the results of your background check, we reserve the right to rescind this offer should the results of your background investigation not be successful. We will contact you as soon as the background check process has been completed.

Arbitration
The parties hereby waive their rights to a trial before a judge or jury and agree to arbitrate before a neutral arbitrator any and all claims or disputes arising out of this agreement, and any and all claims arising from or relating to Employee’s employment with the Company, including, but not limited to: claims against any current or former employee, director or agent of the Company, any claim of wrongful termination, retaliation, discrimination, harassment, breach of contract, breach of covenant of good faith and fair dealing, defamation, invasion of privacy, fraud, misrepresentation, constructive discharge, failure to provide a leave of absence, claims regarding commissions, stock options or bonuses, infliction of emotional distress, unfair business practices.

The arbitrator’s decision shall be written and must include the findings of fact and law that support the decision. The arbitrator’s decision will be final and binding on both parties, except to the extent applicable law allows for judicial review of arbitration awards. The arbitration shall be

conducted in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; provided, however that the arbitrator shall allow the discovery authorized by the California Arbitration Act, or that discovery the arbitrator deems necessary for the parties to vindicate their respective claims or defenses. The arbitration shall take place in San Mateo County or, at the Employee's option, the county in which the Employee primarily worked with the Company at the time the arbitrable dispute or claim first arose.

The parties will share the costs of arbitration equally except that the Company will bear the cost of the arbitrator's fee, any other type of expense or cost that the Employee would not be required to bear if the Employee were to bring the dispute or claim in court. Both the Company and the Employee will be responsible for their own attorney's fees, and the arbitrator may not award attorney's fees unless a statute or contract at issue specifically authorizes such an award. The arbitrator may award any remedies that would otherwise be available to the parties if they were to bring the dispute in court.

This arbitration provision does not apply to the following: (i) claims concerning worker's compensation or unemployment insurance claims or (ii) claims concerning the validity, infringement, or enforceability of any trade secret, patent right, copyright, or any other trade secret or intellectual property held or sought by either Employee or the Company (whether or not arising under the Company's Confidentiality Agreement).

Successors
This agreement is binding on and may be enforced by the Company and its successors and assigns and is binding upon and may be enforced by you and your heirs and legal representatives. Any successor to the Company (whether by purchase, merger, consolidation, name change or otherwise) will be bound by all of the Company's obligations under this agreement.

Governing Law
This agreement will be governed by the laws of the State of California without reference to the conflict of law provision.

Multiple Counterparts
This agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

This offer will remain open until the close of business on December 15, 2014 and, together with the Confidentially Agreement, set forth the terms of your employment with Pulmonx and supersede any prior representations or agreements, whether written or oral. This letter may not be modified or amended except by a written agreement, signed by Pulmonx and by you.

By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company. Your starting date will be December 16, 2014, or a date mutually agreed upon by both parties.

If you wish to accept this offer, please sign and date this letter in the spaces designated below and return it to me. In accordance with Federal regulations, please bring proof of your identity and authorization to work in the United States when you begin work. This documentation must be provided no later than your third working day.

700 Chesapeake Drive / Redwood City / California 94063 / Tel (650) 364 0400 / Fax (650) 364 0403 / www.pulmonx.com

I am extremely pleased to extend you this offer, and look forward to the opportunity of working with you to make Pulmonx an exciting and successful venture.

Sincerely,

/s/ Glen French
Glen French
President and CEO

The foregoing terms are hereby understood and accepted.

/s/ Beran Rose	16 Dec 2014
Beran Rose	Date

March 12, 2019

Derrick Sung, Ph.D.
[Address Intentionally Omitted]

Dear Derrick:

On behalf of Pulmonx (the "Company"). I am pleased to offer you employment with the Company on the terms described below.

Position
You will start in a full-time, exempt position as Chief Financial Officer working out of the Company's office in Redwood City, California. You will report to me.

Compensation
You will be paid an annual salary of $300,000. Your salary will be payable in two equal payments per month pursuant to Pulmonx's regular payroll policy (subject to normal required withholding). You will also be eligible to participate in the Company's bonus plan. The bonus plan is tied to performance objectives. The amount of the bonus is subject to approval by the Company's Board of Directors. Based on your position, you will be eligible to receive a bonus of up to approximately 25% of your annual salary. In order to receive a bonus you must be in good standing with the Company and employed at the time the bonus is paid. Your base salary will be reviewed annually as part of the Company's normal salary review process.

Benefits
You will have the opportunity to participate in the standard benefit plans currently offered to other similarly situated employees, subject to eligibility requirements. These benefits include health insurance, paid time off, and a 401 (k) plan. The effective date of your group health insurance will be the first of the month following your date of hire. Vacation is accrued at the rate of 13.33 hours per month, which equates to 20 days per year.

Stock Options
In connection with the commencement of your employment, the management of Pulmonx will recommend that its Board of Directors grant you two stock options to purchase shares of Common Stock. The first stock option will be for a number of shares of Common Stock representing 0.67% of the fully diluted capitalization of the Company post the impending Preferred Stock financing, with an exercise price equal to the fair market value of such Common Stock on the date of grant. The grant is immediately exercisable and will vest 25% on your one-year anniversary, and then at a rate of 1/48th per month, with the option being fully vested after

four (4) years from your date of hire. The second stock option will be for a number of shares of Common Stock representing 0.33% of the fully diluted capitalization of the Company post the impending Preferred Stock financing, with an exercise price equal to the fair market value of such Common Stock on the date of grant. The second option will commence vesting on the earlier of (i) the one-year anniversary of your start date or (ii) the closing of the Company's initial public offering ("IPO") and will vest monthly over three years (1/36th/month). If however, on the one year anniversary of your start date the Company has not closed its IPO and the Company is in bona fide discussions regarding the sale of the Company (such determination of bona fide discussions to be made by the Board of Directors in good faith), then the second option shall terminate and not vest in any part assuming those discussions result in the sale of the Company. However, if the bona fide discussions regarding the sale of the Company come to a clear end (such determination to be made by the Board of Directors in good faith) or extend more than 180 days beyond the one-year anniversary of your start date without the sale of the Company then the Option will commence vesting back on the one-year anniversary of your start date and will vest monthly over three years (1/36/month). The option will be subject to the terms of Pulmonx's 2010 Stock Plan and the Stock Option Agreement between you and Pulmonx. If you choose to early exercise your option, Pulmonx will have the right to repurchase any unvested shares in the event of termination of your employment relationship. Finally, you will participate in the Company's Management Incentive Plan for as long as you are a regular, full-time employee of the Company, and subject to any changes that may be generally made to the Plan.

Confidential Information and Invention Assignment Agreement

Like all Pulmonx employees, you will be required, as a condition of your employment with the Company, to sign the Company's standard Confidential Information and Invention Assignment Agreement ("Confidentiality Agreement").

Employment Relationship
Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations which may have been made to you are superseded by this offer letter. This is the full and complete agreement between you and the Company. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and the Company's CEO.

This offer is contingent upon successful completion of a background check. As we have not received the results of your background check, we reserve the right to rescind this offer should the results of your background investigation not be successful. We will contact you as soon as the background check process has been completed.

Arbitration
The parties hereby waive their rights to a trial before a judge or jury and agree to arbitrate before a neutral arbitrator any and all claims or disputes arising out of this agreement, and any and all claims arising from or relating to Employee's employment with the Company, including, but not limited to: claims against any current or former employee, director or agent of the Company, any claim of wrongful termination, retaliation, discrimination, harassment, breach of contract, breach of covenant of good faith and fair dealing, defamation, invasion of privacy, fraud, misrepresentation, constructive discharge, failure to provide a leave of absence, claims regarding commissions, stock options or bonuses, infliction of emotional distress, unfair business practices.

The arbitrator's decision shall be written and must include the findings of fact and law that support the decision. The arbitrator's decision will be final and binding on both parties, except to the extent applicable law allows for judicial review of arbitration awards. The arbitration shall be conducted in accordance with the National Rules for the Resolution of Employment Disputes of the American Arbitration Association; provided, however that the arbitrator shall allow the discovery authorized by the California Arbitration Act, or that discovery the arbitrator deems necessary for the parties to vindicate their respective claims or defenses. The arbitration shall take place in San Mateo County or, at the Employee's option, the county in which the Employee primarily worked with the Company at the time the arbitrable dispute or claim first arose.

The parties will share the costs of arbitration equally except that the Company will bear the cost of the arbitrator's fee, any other type of expense or cost that the Employee would not be required to bear if the Employee were to bring the dispute or claim in court. Both the Company and the Employee will be responsible for their own attorney's fees, and the arbitrator may not award attorney's fees unless a statute or contract at issue specifically authorizes such an award. The arbitrator may award any remedies that would otherwise be available to the parties if they were to bring the dispute in court.

This arbitration provision does not apply to the following: (i) claims concerning worker's compensation or unemployment insurance claims or (ii) claims concerning the validity, infringement, or enforceability of any trade secret, patent right, copyright, or any other trade secret or intellectual property held or sought by either Employee or the Company (whether or not arising under the Company's Confidentiality Agreement).

Successors
This agreement is binding on and may be enforced by the Company and its successors and assigns and is binding upon and may be enforced by you and your heirs and legal representatives. Any successor to the Company (whether by purchase, merger, consolidation, name change or otherwise) will be bound by all of the Company's obligations under this agreement.

Governing Law
This agreement will be governed by the laws of the State of California without reference to the conflict of law provision.

Multiple Counterparts
This agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

This offer will remain open until the close of business on Friday, March 15, 2019 and, together with the Confidentially Agreement, set forth the terms of your employment with Pulmonx and supersede any prior representations or agreements, whether written or oral. This letter may not be modified or amended except by a written agreement, signed by Pulmonx and by you.
By signing this letter, you confirm with the Company that you are under no contractual or other legal obligations that would prohibit you from performing your duties with the Company. Your starting date will be no later than May 6, 2019.

If you wish to accept this offer, please sign and date this letter in the spaces designated below and return it to me. In accordance with Federal regulations, please bring proof of your identity and authorization to work in the United States when you begin work. This documentation must be provided no later than your third working day.

I am extremely pleased to extend you this offer, and look forward to the opportunity of working with you to make Pulmonx an exciting and successful venture.

Sincerely,

/s/ Glen French

Glen French
President and CEO

The foregoing terms are hereby understood and accepted.

/s/ Derrick Sung	3/13/2019
Derrick Sung, Ph.D.	Date

PULMONX INTERNATIONAL SARL

CONSULTING AGREEMENT

This Consulting Agreement (the "Agreement") is effective as of October 1, 2013 ("Effective Date") and is entered into by and between Pulmonx International Sarl, a Swiss company (collectively with any or its current or future subsidiaries, affiliates, successors or assigns, the "Company"), and ORSCO LIFE SCIENCES AG ("Consultant"). The parties agree to the following:

1. Consulting Relationship. During the term of this Agreement, Consultant will provide consulting services to the Company (the "Services"). Consultant shall use Consultant's best efforts to perform the Services such that the results are satisfactory to the Company. Any consulting relationship between the Company and Consultant, whether commenced prior to or upon the date of this Agreement, shall be referred to herein as the "Consulting Relationship".

2. Compensation. As consideration for the Services to be provided by Consultant, the Company shall pay to Consultant the amounts or issue the equity specified in Exhibit A attached to this Agreement at the times specified therein.

3. Expenses. Consultant shall not be authorized to incur on behalf of the Company any expenses in excess of $5,000.00 without the prior consent of the Company.

4. Term and Termination. Consultant shall serve as a consultant to the Company for a period commencing on the Effective Date of the Agreement and continuing for a period of three (3) years. Notwithstanding the above, Consultant understands and acknowledges that the Consulting Relationship with the Company is and shall continue to be at-will, as defined under applicable law, meaning that Consultant or the Company may terminate the Consulting Relationship and this Agreement at any time for any reason or no reason upon thirty (30) days prior written notice, without further obligation or liability. In the event of such termination, Consultant shall be paid or otherwise compensated for any portion of the Services that have been performed prior to the termination; provided that if Consultant is terminated by the Company during the first year of this Agreement, the Company will pay Consultant an amount equal to 148,000 Swiss Francs minus any monies already paid to Consultant under this Agreement for such first year.

5. Independent Contractor. Consultant's relationship with the Company will be that of an independent contractor and not that of an employee.

(a) Method of Provision of Services. Consultant may, at Consultant's own expense, employ or engage the service of such employees or subcontractors as Consultant deems necessary to perform the Services required by this Agreement (the "Assistants"). Such Assistants are not the employees of the Company and Consultant shall be wholly responsible for the professional performance of the Services by his Assistants such that the results are satisfactory to the Company. Consultant shall expressly advise the Assistants of the terms of this Agreement, and shall require each Assistant to execute a Confidentiality and Invention Assignment Agreement with terms and conditions substantially similar to those contained in Section 8 ("Confidentiality and Invention Assignment") of this Agreement.

(b) No Authority to Bind Company. Neither Consultant, nor any partner, agent or employee of Consultant, has authority to enter into contracts that bind the Company or create obligations on the part of the Company without the prior written authorization of the Company.

(c) No Benefits. Consultant acknowledges and agrees that Consultant (or Consultant's employees. if Consultant is an entity) will not be eligible for any Company employee benefits and hereby expressly declines to participate in such Company employee benefits.

(d) Withholding; Indemnification. Consultant shall have full responsibility for applicable withholding taxes for all compensation paid to Consultant, its partners, agents or its employees under this Agreement, and for compliance with all applicable labor and employment requirements with respect to Consultant's business organization and Consultant's partners, agents and employees. Consultant agrees to indemnify. defend and hold the Company harmless from any liability for, or assessment of, any claims or penalties with respect to such withholding taxes, labor or employment requirements.

6. Supervision of Consultant's Services. All of the Services to be performed by Consultant, including but not limited to the Services, will be as agreed between Consultant and the Company. Consultant will be required to report to the Company concerning the Services performed under this Agreement. The nature and frequency of these reports will be left to the discretion of the Company.

7. Consulting or Other Services for Competitors. Consultant represents and warrants that Consultant does not presently perform or intend to perform, during the term of the Agreement, consulting or other services for, or engage in or intend to engage in an employment relationship with, companies whose businesses or proposed businesses in any way involve products or services which would be competitive with the Company's products or services, or those products or services proposed or in development by the Company during the term of the Agreement (except for those companies, if any, listed on Exhibit B attached hereto). Consultant has attached hereto, as Exhibit B, a list of all companies that Consultant presently performs such work for that may meet the requirements of the foregoing sentence (collectively referred to as "Current Competitors"); or, if no such list is attached, Consultant represents that there are no such Current Competitors. Such list specifies the name of the Current Competitor (except in the case that Consultant is contractually bound by an agreement with such Current Competitor not to disclose Consultant's relationship with such Current Competitor). Such list also provides information (including, but not limited to, the type of relationship Consultant has with the Current Competitor) sufficient to allow the Company to determine if such work for the Current Competitor conflicts with the terms of this Agreement, including the terms of Section 8 ("Confidentiality and Invention Assignment") of this Agreement, the interests of the Company or the Services. If Consultant decides. during the term of this Agreement, to perform such work for a company not listed on Exhibit B (referred to as a "New Competitor") or Consultant's relationship with any Current Competitor changes such that Consultant "s ownership interest in the Current Competitor's organization significantly increases or the Current Competitor's technology becomes more similar to the Company's technology, Consultant agrees that, in advance of accepting or continuing such work, Consultant will promptly notify the Company in writing, providing updated information for the New Competitor or the Current Competitor, as the case may be, to the list contained in Exhibit B. If the Company determines that such work conflicts with the terms of this Agreement, the interests or the Company or the Services, the Company reserves the right to terminate this Agreement immediately. In addition, if at any time the Board or Directors of Pulmonx notifies Consultant that it no longer approves of the work that Consultant is performing for Uptake Medical, Consultant agrees to terminate such work with Uptake Medical within sixty (60) days or receipt or such notice.

8. Confidentiality and Invention Assignment. In the event that Consultant is an entity or otherwise will be causing individuals in its employ or under its supervision to participate in the rendering of the Services, Consultant warrants that it shall cause each of such individuals to execute a Confidentiality and Invention Assignment Agreement with terms and conditions substantially similar to those contained in this Section 8 ("Confidentiality and Invention Assignment") of this Agreement.

(a) Confidential Information.

(1) Company Information. Consultant agrees at all times during the term of its Consulting Relationship with the Company and thereafter, to hold in strictest confidence, and not to use or permit the use of, except for the benefit or the Company to the extent necessary to perform the Consultant's obligations to the Company under the Consulting Relationship, or to disclose or permit the disclosure of to any person, firm, corporation or other entity without written authorization of the Chief Executive Officer of Pulmonx, any Confidential Information of the Company which Consultant obtains or creates. Consultant further agrees not to make copies of such Confidential Information except as authorized by the Company. Consultant understands that "Confidential Information" means: (i) any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, suppliers, customer lists and customers (including, but not limited to, customers of the Company on whom Consultant called or with whom Consultant became acquainted during the Consulting Relationship), prices and costs, markets, software, developments, inventions, laboratory notebooks, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, licenses, finances, budgets or other business information disclosed to Consultant by the Company either directly or indirectly in writing, orally or by drawings or observation of parts or equipment or created by Consultant during the period of the Consulting Relationship, whether or not during working hours; (ii) the existence of the Consulting Relationship between Consultant and the Company; and (iii) the terms and conditions of this Agreement. Consultant understands that Confidential Information includes, but is not limited to, information pertaining to any aspect of the Company's business which is either information not known by actual or potential competitors of the Company or other third parties not under confidentiality obligations to the Company, or is otherwise proprietary information of the Company or its customers or suppliers, whether of a technical nature or otherwise. Consultant further understands that Confidential Information does not include any of the foregoing items which has become publicly and widely known and made generally available through no wrongful act of Consultant or of others who were under confidentiality obligations as to the item or items involved. Consultant will notify the Company in writing or any actual or suspected misuse, misappropriation or unauthorized disclosure of the Confidential Information which may come to Consultant's attention.

(2) Prior Obligations. Consultant represents that its performance or all terms of this Agreement as a consultant of the Company has not breached and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by Consultant prior or subsequent to the commencement of Consultant's Consulting Relationship with the Company, and Consultant will not disclose to the Company or use any inventions, confidential or non-public proprietary information or material belonging to any previous client, employer or any other party. Consultant will not induce the Company to use any inventions, confidential or non-public proprietary information, or material belonging to any previous client, employer or any other party.

(3) Third Party Information. Consultant recognizes that the Company has received and in the future will receive confidential or proprietary information from third parties subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for

certain limited purposes. Consultant agrees to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out Consultant's work for the Company consistent with the Company's agreement with such third party.

(b) Inventions.

(1) Inventions Retained and Licensed. Consultant has attached hereto, as Exhibit C, a list describing with particularity all inventions, original works of authorship, developments, improvements, and trade secrets which were made by Consultant prior to the commencement of the Consulting Relationship (collectively referred to as "Prior Inventions"), which belong solely to Consultant or belong to Consultant jointly with another, and which are not assigned to the Company hereunder; or, if no such list is attached, Consultant represents that there are no such Prior Inventions. If, in the course of Consultant's Consulting Relationship with the Company, Consultant incorporates into a Company product, process or machine a Prior Invention owned by Consultant or in which Consultant has an interest, the Company is hereby granted and shall have a non-exclusive, fully paid, irrevocable, perpetual, worldwide license (with the right to sublicense) to make, have made, copy, modify, make derivative works of, use, sell, offer to sell, import, distribute and otherwise exploit such Prior Invention as part of or in connection with such product, process or machine.

(2) Assignment of Inventions. Consultant agrees that it will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and will, and hereby does, without further consideration, assign, transfer and convey to the Company all Consultant's rights, title and interests throughout the world in and to any and all inventions, techniques, methods, original works of authorship, developments, concepts, know-how, improvements or trade secrets, whether or not patentable or registrable under copyright or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of Consultant's Consulting Relationship with the Company (collectively referred to as "Inventions"). Consultant further acknowledges that all Inventions which are made by Consultant (solely or jointly with others) within the scope of and during the period of Consultant's Consulting Relationship with the Company are "works made for hire" (to the greatest extent permitted by applicable law) and are compensated by such amounts paid to Consultant under this Agreement, unless regulated otherwise by the mandatory law of the state of California.

(3) Maintenance of Records. Consultant agrees to keep and maintain adequate and current written records of all Inventions made by Consultant (solely or jointly with others) during the term of Consultants Consulting Relationship with the Company. The records may be in the form of notes, sketches, drawings, flow charts, electronic data or recordings, laboratory notebooks, and any other format. The records will be available to and remain the sole property of the Company at all times. Consultant agrees not to remove such records from the Company's place of business except as expressly permitted by Company policy which may, from time to time, be revised at the sole election of the Company for the purpose of furthering the Company's business. Consultant agrees to return all such records (including any copies thereof) to the Company at the time of termination of Consultant's Consulting Relationship with the Company as provided for in Section 8(c).

(4) Patent and Copyright Rights. Consultant agrees to assist the Company, or its designee, at its expense, in every proper way to secure the Company's, or its designee's, rights in the Inventions and any copyrights, patents, trademarks, mask work rights, moral rights, or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company or its

designee of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments, recordations, and all other instruments which the Company or its designee shall deem reasonably necessary in order to apply for, obtain, perfect, maintain and transfer such rights, or if not transferable, waive such rights, and in order to assign, transfer and convey to the Company or its designee, and any successors, assigns and nominees the sole and exclusive rights, title and interests in and to such Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto. Consultant further agrees that its obligation to execute or cause to be executed, when it is in its power to do so, any such instrument or papers shall continue after the termination or expiration of this Agreement until the expiration of the last such intellectual property right to expire in any country of the world. If the Company or its designee is unable because of Consultant's mental or physical incapacity or unavailability or for any other reason to secure Consultant's signature to apply for or to pursue any application for any United States or foreign patents, copyright, mask works or other registrations covering Inventions or original works of authorship assigned to the Company or its designee as above, then Consultant hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Consultant's agent and attorney in fact, to act for and in Consultant's behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the application for, prosecution, issuance, perfection, maintenance or transfer of letters patent, copyright or other registrations thereon with the same legal force and effect as if originally executed by Consultant. Consultant hereby waives and irrevocably quitclaims to the Company or its designee any and all claims, of any nature whatsoever, which Consultant now or hereafter has for infringement of any and all proprietary rights assigned to the Company or such designee.

(c) Company Property; Returning Company Documents. Consultant acknowledges and agrees that Consultant has no expectation of privacy with respect to the Company's telecommunications, networking or information processing systems (including, without limitation, stored company files, e-mail messages and voice messages) and that Consultant's activity and any files or messages on or using any of those systems may be monitored at any time without notice. Consultant further agrees that any property situated on the Company's premises and owned by the Company, including disks and other storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice. Consultant agrees that, at the time of termination of Consultant's Consulting Relationship with the Company, Consultant will deliver to the Company (and will not keep in its possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, laboratory notebooks, materials, now charts, equipment, other documents or property, or reproductions of any of the aforementioned items developed by Consultant pursuant to the Consulting Relationship or otherwise belonging to the Company, its successors or assigns. In the event of the termination of the Consulting Relationship, if requested by the Company, Consultant agrees to deliver a written and signed certification that the provisions of this Section 8(c) have been complied with.

(d) Notification to Other Parties. Consultant hereby grants consent to notification by the Company to any other parties besides the Company with whom Consultant maintains a consulting relationship, including parties with whom such relationship commences after the Effective Date of this Agreement, about Consultant's rights and obligations under this Agreement.

(e) Solicitation of Employees, Consultants and Other Parties. Consultant agrees that during the term of Consultant's Consulting Relationship with the Company, and for a period of twenty-four (24) months immediately following the termination of Consultant's Consulting Relationship with the Company for any reason, whether with or without cause, Consultant shall not either directly or indirectly solicit, induce, recruit or encourage any of the Company's employees or consultants to terminate their

relationship with the Company, or attempt to solicit, induce, recruit, encourage or take away employees or consultants of the Company, either for itself or for any other person or entity. Further, during Consultant's Consulting Relationship with the Company and at any time following termination of Consultant's Consulting Relationship with the Company for any reason, with or without cause, Consultant shall not use any Confidential Information of the Company to attempt to negatively influence any of the Company's clients or customers from purchasing Company products or services or to solicit or influence or attempt to influence any client, customer or other person either directly or indirectly, to direct his or its purchase of products and/or services to any person, firm, corporation, institution or other entity in competition with the business of the Company.

9. Representations and Covenants.

(a) Facilitation of Agreement. Consultant agrees to execute promptly any proper oath or verify any proper document required to carry out the terms of this Agreement upon the Company's written request to do so.

(b) Conflicts with this Agreement. Consultant represents and warrants that neither Consultant nor any of Consultant's partners, employees or agents is under any pre-existing obligation in conflict or in any way inconsistent with the provisions of this Agreement. Consultant represents and warrants that Consultant's performance of all the terms of this Agreement does not and will not breach any agreement Consultant has entered into, or will enter into with any third party, including without limitation any agreement to keep in confidence proprietary information acquired by Consultant in confidence or in trust prior to commencement of Consultant's Consulting Relationship with the Company. Consultant agrees not to enter into any written or oral agreement that conflicts with the provisions of this Agreement. Consultant warrants that Consultant has the right to disclose and/or or use all ideas, processes, techniques and other information, if any, which Consultant has gained from third parties, and which Consultant discloses to the Company or uses in the course of performance of this Agreement, without liability to such third parties. Notwithstanding the foregoing. Consultant agrees that Consultant shall not bundle with or incorporate into any deliveries provided to the Company herewith any third party products, ideas, processes, techniques or other information, without the express, written prior approval of the Company. Consultant represents and warrants that Consultant has not granted and will not grant any rights or licenses to any intellectual property, proprietary information or technology that would conflict with Consultant's obligations under this Agreement. Consultant will not knowingly infringe upon any copyright, patent, trade secret, intellectual property or other property right of any former client, employer or third party in the performance of the Services required by this Agreement.

10. Miscellaneous.

(a) Amendments and Waivers. Any term of this Agreement may be amended or waived only with the written consent of the parties. Any subsequent change or changes in Consultant's duties, obligations, rights, or compensation will not affect the validity or scope of this Agreement.

(b) Sole Agreement. This Agreement, including the Exhibits hereto, constitutes the sole agreement of the parties and supersedes all oral negotiations and prior writings with respect to the subject matter hereof

(c) Notices. Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient upon receipt, when delivered personally or by courier, overnight delivery service or confirmed facsimile, forty-eight (48) hours after being deposited in the regular mail as certified or registered mail (airmail if sent internationally) with postage prepaid, if such notice is addressed to the

party to be notified at such party's address or facsimile number as set forth below, or as subsequently modified by written notice.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws or Switzerland.

(e) Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement. (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(f) Assignment. This Agreement may be freely assigned by the Company and will be for the benefit of the Company, its successors, and its assigns. This Agreement is personal with respect to the Consultant and may be not assigned.

(g) Survival. The provisions of Section 8 ("Confidentiality and Invention Assignment") of this Agreement shall survive the termination or expiration of this Agreement.

(h) Remedies. Consultant acknowledges and agrees that violation of this Agreement by Consultant may cause the Company irreparable harm, and therefore agree that the Company will be entitled to seek extraordinary relief in court, including but not limited to temporary restraining orders, preliminary injunctions and permanent injunctions without the necessity of posting a bond or other security and in addition to and without prejudice to any other rights or remedies that the Company may have for a breach of this Agreement.

(i) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

(j) Advice of Counsel. EACH PARTY ACKNOWLEDGES THAT, IN EXECUTING THIS AGREEMENT, SUCH PARTY HAS HAD THE OPPORTUNITY TO SEEK THE ADVICE OF INDEPENDENT LEGAL COUNSEL, AND HAS READ AND UNDERSTOOD ALL OF THE TERMS AND PROVISIONS OF THIS AGREEMENT. THIS AGREEMENT SHALL NOT BE CONSTRUED AGAINST ANY PARTY BY REASON OF THE DRAFTING OR PREPARATION HEREOF.

[Signature Page Follows]

The parties have executed this Agreement as of the Effective Date first set forth above.

COMPANY:

PULMONX INTERNATIONAL SARL

By: /s/ Martin Schneider

Date: Dec 18, 2013

Address: Rue de la Treille 4
2000 Neuchâtel
Switzerland

CONSULTANT: ORSCO LIFE SCIENCES AG

By: /s/ Oern Stuge
Oern Stuge

Date: 18/12/2013

Address: [Address Intentionally Omitted]

EXHIBIT A

COMPENSATION

1. In consideration of Consultant's performance of the Services outlined in Section 1, above, Company will pay Consultant the annual rate of 148,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices.

EXHIBIT B

LIST OF COMPANIES CONSULTANT PROVIDES CONSULTING OR OTHER SERVICES TO THAT ARE COMPETITORS TO THE COMPANY AND EXCLUDED UNDER SECTION 7

1. Uptake Medical

EXHIBIT C

LIST OF PRIOR INVENTIONS
AND ORIGINAL WORKS OF AUTHORSHIP
EXCLUDED UNDER SECTION 8(b)(1)

Title	Date	Identifying Number or Brief Description

AMENDMENT TO CONSULTING AGREEMENT

Exhibit A to the Consulting Agreement (the "Agreement") between Pulmonx International Sárl ("Company") and Orsco Life Sciences AG ("Consultant") effective as of October 1, 2013, is hereby amended and restated to read as follows:

"EXHIBIT A

COMPENSATION

1. In consideration of Consultant's performance of the Services outlined in Section 1, above, Company will pay Consultant the annual rate of 148,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices; provided that effective as of March 1, 2014, Company will pay Consultant the annual rate of 196,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices."

Those changes will be effected and become part of the Consulting Agreement on March 1, 2014. With the exception of the above modifications, all other provisions of the Consulting Agreement remain full in force and effect.

Place and date	Place and date
Neuchâtel, March 1, 2014	Zug, March 1, 2014
Company Pulmonx International Sàrl	Consultant Orsco Life Sciences AG
/s/ Martin Schneider	/s/ Oern Stuge
Martin Schneider VP & CFO	Oern Stuge

SECOND AMENDMENT TO CONSULTING AGREEMENT

Exhibit A to the Consulting Agreement (the "Agreement") between Pulmonx International Sàrl ("Company") and Orsco Life Sciences AG ("Consultant") effective as of October 1, 2013, as amended as of March 1, 2014 is hereby amended and restated to read as follows:

"EXHIBIT A

COMPENSATION

1. In consideration of Consultant's performance of the Services outlined in Section 1, above, Company will pay Consultant the annual rate of 148,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices; provided that (a) effective as of March 1, 2014, Company will pay consultant the annual rate of 196,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices, and (b) effective as of June 2, 2014, Company will pay Consultant the annual rate of 306,000 Swiss Francs in arrears after the end of each calendar quarter within 30 days following the receipt of invoices. At such time as the Board of Directors of Pulmonx Corporation, the parent corporation of Company, appoints a new Chief Executive Officer of Pulmonx Corporation, Company will continue to pay Consultant at the annual rate of 306,000 Swiss Francs until the later of (i) 90 days after such appointment or (ii) December 31, 2014, at which time the payment will revert to the annual rate of 196,000 Swiss Francs."

Those changes will be effected and become part of the Consulting Agreement as of June 2, 2014. With the exception of the above modifications, all other provisions of the Consulting Agreement remain full in force and effect.

Place and date	Place and date
Neuchâtel, July 14, 2014	Zug 13/7/2014
Company	Consultant
Pulmonx International Sàrl	Orsco Life Sciences AG
By: /s/ Martin Schneider	By: /s/ Oern Stuge
Name: Martin Schneider	Name: Oern Stuge
Title: VP & CFO	

THIRD AMENDMENT TO CONSULTING AGREEMENT

Exhibit A to the Consulting Agreement (the "Agreement") between Pulmonx International Sàrl ("Company") and Orsco Life Sciences AG ("Consultant") effective as of October 1, 2013, as amended, is hereby amended and restated to read as follows:

"EXHIBIT A

COMPENSATION

1. In consideration of Consultant's performance of the Services outlined in Section 1, above, effective as of May 1, 2015, Company will pay Consultant the annual rate of 60,000 Swiss Francs in arrears after the end of each calendar quarter, within 30 days following the receipt of invoices. "

These changes will be effected and become part of the Agreement on May 1, 2015. With the exception of the above modifications, all other provisions of the Consulting Agreement remain in full force and effect.

Place and date	Place and date
Neuchâtel, April 27, 2015	Zug 23/4/2015
Company Pulmonx International Sàrl	Consultant Orsco Life Sciences AG
/s/ Martin Schneider Martin Schneider VP & CFO	/s/ Oern Stuge Oern Stuge

Oern R. Stuge
[Address Intentionally Omitted]

APPOINTMENT LETTER

Dear Oern,

This is with respect to our various discussions related to the management of PulmonX International Sárl (the "Company"). Herewith, we would like to confirm your appointment as Executive Chairman of the Company as follows:

Position

Effective October 1, 2013 you are appointed under mandate as Executive Chairman of PulmonX International Sárl ("gérant président").

As such, you represent PulmonX International Sárl, Rue de la Treille 4, 2000 Neuchâtel, Switzerland, and its subsidiaries and report directly to Mr. Rodney Perkins, of PulmonX.

Compensation

Your annual compensation for this mandate shall be CHF 12,000.00 payable on a monthly basis. This amount is subject to social security deductions as applicable. Provided that if your are terminated by the Company during the first year of the appointment, the Company will pay you an amount equal to CHF 12,000 minus any monies already paid to you under this Appointment Letter for such first year.

In addition, the Company will recommend that the Board of Directors of Pulmonx, grant you an option to purchase 262,541 shares of common stock of Pulmonx (representing approximately 0.25% of the fully diluted capitalization of Pulmonx) with an exercise price per share equal to the fair market value on the date of grant. The option will be a non-statutory option and will be subject to early exercise. The shares under the option will vest 1/36 per month on each monthly anniversary of the Effective Date, for a total vesting period of three years. In the event of the Change of Control of Pulmonx (as that term is defined in the Pulmonx 2010 Stock Plan), all of the shares subject to the option shall fully vest.

Confidentiality

According to this mandate as Executive Chairman, you have a duty of care and loyalty and must not exploit or reveal confidential information obtained while in the Company's service, such as manufacturing or trade secrets; you remain bound by such duty of confidentiality even after the end of your mandate to the extend required to safeguard the Company's legitimate interests.

With this respect, you confirm being aware that due to your position, your duty of confidentiality is particularly extended.

Applicable law

This agreement is governed by the substantive laws of Switzerland.

Neuchâtel, December 18, 2013

Pulmonx International Sarl

/s/ Martin Schneider

Oern Stuge

/s/ Oern Stuge

OFFICE LEASE

BRITINNIA SEAPORT CENTRE

HCP LS REDWOOD CITY, LLC

as Landlord,

and

PULMONX, INC.,

as Tenant.

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BRITANNIA SEAPORT CENTRE

OFFICE LEASE

This Office Lease (the "**Lease**"), dated as of the date set forth in Section 1 of the Summary of Basic Lease Information (the "**Summary**"), below, is made by and between **HCP LS REDWOOD CITY, LLC,** a Delaware limited partnership ("**Landlord**"), and **PULMONX, INC.,** a California corporation ("**Tenant**").

SUMMARY OF BASIC LEASE INFORMATION

TERMS OF LEASE		DESCRIPTION
1. Date:		September 4, 2009
2. Premises (Article 1).		
2.1	Building:	A freestanding, single story office building with a street address of 700 Chesapeake Drive Redwood City, California 94063
2.2	Premises:	24,591 rentable square feet of space consisting of all of the rentable area of the Building, as further set forth in **Exhibit A** to the Office Lease.
3. Lease Term (Article 2).		
3.1	Length of Term:	Six (6) years.
3.2	Lease Commencement Date:	August 1, 2009.
3.3	Lease Expiration Date:	June 30, 2015

4. Base Rent (Article 3):

Month of Lease Term	Monthly Installment of Base Rent	Monthly Base Rent per Rentable Square Foot
1 - 12*	$23,977.20	$1.95
13 - 24	$36,886.50	$1.50
25 - 36	$50,903.37	$2.07
37- 48	$54,100.20	$2.20
49 - 60	$55,821.57	$2.27
61- 72	$57,297.03	$2.33

Note that for the first twelve (12) months of the Lease Term, Tenant's Base Rent obligation shall be calculated as if the Premises contained only 12,296 rentable square feet of space. Such calculation shall not affect Tenant's right to use the entire Premises, or Tenant's other rights and obligations under the Lease with respect to the Premises, including without limitation, Tenant's obligation to pay Tenant's Share of Direct Expenses with respect to the entire Premises, all in accordance with the terms and conditions of this Lease.

5.	Tenant Improvements:	Tenant agrees that it is accepting the Premises and improvements therein in their currently existing, "as is" condition.
6.	Tenant's Share (Article 4):	Tenant's Share of the Building is 100%. Tenant's Share of the Project is 3 .91 % (based on the Building containing 24,591 rentable square feet, and the total Project containing 628,937 rentable square feet).
7.	Permitted Use (Article 5):	The Premises shall be used only for general office, sales, product manufacturing, research and development, engineering, laboratory, storage and/or warehouse uses, including, but not limited to, administrative offices and other lawful uses reasonably related to or incidental to such specified uses, all (i) consistent with first class life sciences projects in Redwood City, California ("**First Class Life Sciences Projects**"), and (ii) in compliance with, and subject to, applicable laws and the terms of this Lease. Notwithstanding anything to the contrary set forth hereinabove, Tenant shall be responsible for operating and maintaining the Premises pursuant to (A) Landlord's reasonable rules and regulations, and (C) all applicable zoning and building codes, and (D) all recorded easements, covenants, conditions, and restrictions now affecting the Project.
8.	Security Deposit (Article 21):	$57,297.03, in the form of cash or a letter of credit, as more particularly described in Article 21 of this Lease. Under the "Short Term Lease", as defined in Section 1. 1.1 of the Lease, Tenant has previously deposited $10,000 which will continue to be held by Landlord during the Lease Term in accordance with Article 21, and credited against the total amount of the Security Deposit set forth above. If Tenant delivers a letter of credit to Landlord in the total amount of the Security Deposit set forth above, the $10,000 shall be returned to Tenant within ten (10) business days after delivery of such letter of credit.
9.	Parking Ratio (Article 28):	3.0 unreserved parking spaces for every 1,000 rentable square feet of the Premises.

10.	Address of Tenant (Section 29.18):	Pulmonx 1047 Elwell Court Palo Alto, CA 94303 Attn: Niyazi Beyhan Telecopier: (650) 934-2601 with a copy to: Ropes & Gray LLP One Embarcadero Center Suite 2200 San Francisco, CA 94111-3711 Attn: Geoffrey P. Leonard Telecopier: (415) 315-4833
11.	Address of Landlord (Section 29.18):	See Section 29.18 of the Lease.
12.	Broker(s) (Section 29.24):	CB Richard Ellis, Inc. 950 Tower Land, Suite 870 Foster City, CA 94404 Attn: Dino Perazzo representing Landlord Odevco PO Box 2099 Sunnyvale, California 94807 Attn: Jason Oderio representing Tenant

ARTICLE 1

PREMISES, BUILDING, PROJECT, AND COMMON AREAS

1.1 **Premises, Building, Project and Common Areas**.

1.1.1 **The Premises**. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the premises set forth in Section 2.2 of the Summary (the "**Premises**"). The outline of the Premises is set forth in **Exhibit A** attached hereto and each floor or floors of the Premises has the number of rentable square feet as set forth in Section 2.2 of the Summary. The outline of the Premises, the "Building" and the "Project," as those terms are defined in Section 1.1.2 below, are further depicted on the Site Plan attached hereto as **Exhibit A-1**. The parties hereto agree that the lease of the Premises is upon and subject to the terms, covenants and conditions herein set forth, and Tenant covenants as a material part of the consideration for this Lease to keep and perform each and all of such terms, covenants and conditions by it to be kept and performed and that this Lease is made upon the condition of such performance. The parties hereto hereby acknowledge that the purpose of **Exhibit A** is to show the approximate location of the Premises in the "Building," as that term is defined in Section 1.1.2, below, only, and such Exhibit is not meant to constitute an agreement, representation or warranty as to the construction of the Premises, the precise area thereof or the specific location of the "Common Areas," as that term is defined in Section 1.1.3, below, or the elements thereof or of the accessways to the Premises or the "Project," as that term is defined in Section 1.1.2, below. Tenant acknowledges that Tenant has been occupying the Premises pursuant to the terms of that certain Short Term Lease Agreement dated as of April 22, 2009 (the "**Short Term Lease**"), and that, except as specifically set forth in this Lease, Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises. Tenant also acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty regarding the condition of the Premises, the Building or the Project or with respect to the suitability of any of the foregoing for the conduct of Tenant's business, except as specifically set forth in this Lease. Subject to applicable law, and Landlord's repair and maintenance obligations as set forth in this Lease, Tenant shall have access to the Premises twenty-four (24) hours a day, seven (7) days a week.

1.1.2 **The Building and The Project**. The Premises consist of all of the rentable square footage of the building set forth in Section 2.1 of the Summary (the "**Building**"). The Building is part of an office project currently known as "**Britannia Seaport Centre Business Park**", which project is located on the land (the "**Land**") the legal description of which is set forth on **Exhibit A-1** attached hereto. The term "**Project**," as used in this Lease, shall mean (i) the Building and the Common Areas, (ii) the other buildings located on the Land (the "**Adjacent Buildings**"), (iii) the Land (which is improved with landscaping, parking facilities and other improvements), and (iv) at Landlord's discretion, any additional real property, areas, land, buildings or other improvements added thereto.

1.1. 3 **Common Areas**. Tenant shall have the non-exclusive right to use in common with other tenants in the Project, and subject to the rules and regulations referred to in Article 5 of this Lease, those portions of the Project which are provided, from time to time, for use in common by Landlord, Tenant and any other tenants of the Project (such areas, together with such other portions of the Project designated by Landlord, in its discretion, including certain areas designated for the exclusive use of certain tenants, or to be shared by Landlord and certain tenants, are collectively referred to herein as the "**Common Areas**"). The Common Areas shall be maintained and operated by Landlord in the manner consistent with the manner customarily employed by owners of comparable life sciences projects in the vicinity of the Project and the use thereof shall be subject to such reasonable rules, regulations and restrictions as Landlord may make from time to time. Landlord reserves the right to close temporarily, make alterations or additions to, or change the location of elements of the Project and the Common Areas, so long as Tenant's access to and use of the Premises is not thereby materially impaired.

1.1. 4 **Termination of Short Term Lease**. Effective retroactively as of the Lease Commencement Date, the Short Term Lease shall be terminated, and all rights and obligations relating to Tenant's use and occupancy of the Premises after such date shall be governed by the terms of this Lease. Amounts paid by Tenant under the Short Term Lease applicable to periods after the Lease Commencement Date shall be applied to

Tenant's obligations under this Lease. The security deposit provided by Tenant under the Short Term Lease shall be applied to the amount of the Security Deposit required to be provided by Tenant under this Lease.

1.2 **Stipulation of Rentable Square Feet of Premises**. For purposes of this Lease, "rentable square feet" of the Premises shall be deemed to be as set forth in Section 2.2 of the Summary, and shall not be subject to further measurement or modification.

ARTICLE 2

LEASE TERM; OPTION TERM

2.1 **Lease Term**. The terms and provisions of this Lease shall be effective as of the date of this Lease. The term of this Lease (the "**Lease Term**") shall be as set forth in Section 3.1 of the Summary, shall commence on the date set forth in Section 3.2 of the Summary (the "**Lease Commencement Date**"), and shall terminate on the date set forth in Section 3.3 of the Summary (the "**Lease Expiration Date**") unless this Lease is extended or sooner terminated as hereinafter provided. For purposes of this Lease, the term "**Lease Year**" shall mean each consecutive twelve (12) month period during the Lease Term. At any time during the Lease Term, Landlord may deliver to Tenant a notice in the form as set forth in **Exhibit C**, attached hereto, as a confirmation only of the information set forth therein, which Tenant shall execute and return to Landlord within five (5) business days of receipt thereof.

2.2 **Option Term**.

2.2.1 **Option Right**. Landlord hereby grants to the originally named Tenant herein (the "Original Tenant") and any "Affiliate Assignee" or "Permitted Transferee," as such terms are defined in Sections 14.8 and 14.9, below, or other assignee of Tenant's entire interest in the Lease that is approved by Landlord pursuant to Article 14, below (an "**Approved Assignee**") one (I) option to extend the Lease Term for a period of five (5) years (the "**Option Term**"). The option to extend shall be exercisable only by notice delivered by Tenant to Landlord as provided in Section 2.2.3, below, provided that, as of the date of delivery of such notice, Tenant is not in default under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease). Upon the proper exercise of the option to extend, and provided that, at Landlord's option, as of the end of the initial Lease Term, Tenant is not in default under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), the Lease Term shall be extended for a period of five (5) years. The rights contained in this Section 2.2 shall be personal to the originally named tenant herein (the "**Original Tenant**"), and any Affiliate Assignee, Permitted Transferee or Approved Assignee (and not any sublessee or other "Transferee," as that term is defined in Section 14 . 1, below, of Tenant's interest in this Lease). In the event that Tenant fails to timely and appropriately exercise its option to extend in accordance with the terms of this Section 2.2, then the option to extend granted to Tenant pursuant to the terms of this Section 2.2 shall automatically terminate and shall be of no further force or effect.

2.2.2 **Option Rent**. The Base Rent payable by Tenant during the first (151) year of the **Option Term** (the "Option Rent") shall be equal to the greater of (i) one hundred three percent (103%) of the Base Rent payable by Tenant as of the expiration of the initial Lease Term, and (ii) the "**Market Rent**," as that term is defined in **Exhibit F**, attached hereto. Market Rent shall be calculated as provided in **Exhibit F**. After the first (1st) year of the Option Term, the Rent payable by Tenant shall be increased annually to equal one hundred thee percent (103%) of the Base Rent payable by Tenant during the prior year of the Option Term.

2.2.3 **Exercise of Option**. The option contained in this Section 2.2 shall be exercised by Tenant, if at all, only in the following manner: (i) Tenant shall deliver written notice (the "**Option Interest Notice**") to Landlord not more than twelve (12) months nor less than nine (9) months prior to the expiration of the initial Lease Term, stating that Tenant is interested in exercising its option; (ii) Landlord shall, within thirty (30) days following Landlord's receipt of the Option Interest Notice, deliver notice (the "**Option Rent Notice**") to Tenant setting forth the Option Rent; and (iii) if Tenant wishes to exercise such option, Tenant shall, on or before the date occurring fifteen (15) days after Tenant's receipt of the Option Rent Notice, deliver written notice thereof to Landlord, and upon, and concurrent with, such exercise, Tenant may, at its option, accept or reject the Option Rent set forth in the Option Rent Notice. If Tenant exercises its option to extend the Lease but fails to accept or reject the

Option Rent set forth in the Option Rent Notice, then Tenant shall be deemed to have accepted the Option Rent set forth in the Option Rent Notice.

2.2.4 **Determination of Option Rent.** In the event Tenant timely and appropriately exercises its option to extend the Lease but rejects the Option Rent set forth in the Option Rent Notice pursuant to Section 2.2.3, above, then Landlord and Tenant shall attempt to agree upon the Option Rent using their best good faith efforts. If Landlord and Tenant fail to reach agreement upon the Option Rent applicable to the Option Term on or before the date that is one hundred eighty (180) days prior to the expiration of the initial Lease Term (the **"Outside Agreement Date"),** then Tenant shall have the right, by delivering written notice to Landlord **("Tenant's Arbitration Notice"),** no later than fifteen (15) days following the Outside Agreement Date, to have the Option Rent determined by arbitration. In the event that Tenant fails to timely and appropriate exercise its right to have the Option Rent determined by arbitration as required pursuant to the terms of this Section 2.2.4, then the option right granted to Tenant pursuant to this Section 2.2 shall automatically terminate and be of no further force or effect. In the event Tenant timely and appropriately exercises its right to arbitrate the determination of the Option Rent, then each party shall thereafter make a separate determination of the Option Rent, within five (5) business days of Landlord's receipt of Tenant's Arbitration Notice, and such determinations shall be submitted to arbitration in accordance with Sections 2.2.4.1 through 2.2.4.4, below.

2.2.4. I Landlord and Tenant shall each appoint one arbitrator who shall be, at the option of the appointing party an MAI appraiser or a real estate broker, who shall have been active over the five (5) year period ending on the date of such appointment in the leasing or appraisal, as the case may be, of life science rise properties in Redwood City and the surrounding commercial area. Each such arbitrator shall be appointed within twenty (20) days after the Outside Agreement Date. Landlord and Tenant may consult with their selected arbitrators prior to appointment and may select an arbitrator who is favorable to their respective positions. The arbitrators so selected by Landlord and Tenant shall be deemed **"Advocate Arbitrators."**

2.2.4.2 The two (2) Advocate Arbitrators so appointed shall be specifically required pursuant to an engagement letter within ten (10) days of the date of the appointment of the last appointed Advocate Arbitrator to agree upon and appoint a third arbitrator **("Neutral Arbitrator")** who shall be qualified under the same criteria set forth hereinabove for qualification of the two Advocate Arbitrators, except that neither the Landlord or Tenant or either parties' Advocate Arbitrator may, directly or indirectly, consult with the Neutral Arbitrator prior or subsequent to his or her appointment. The Neutral Arbitrator shall be retained via an engagement letter jointly prepared by Landlord's counsel and Tenant's counsel.

2.2.4.3 The three arbitrators shall, within thirty (30) days of the appointment of the Neutral Arbitrator, reach a decision as to whether the parties shall use Landlord's or Tenant's submitted Option Rent, and shall notify Landlord and Tenant thereof. The determination of the arbitrators shall be limited solely to the issue of whether Landlord's or Tenant's submitted Option Rent is the closest to the actual Option Rent, taking into account the requirements of Section 2.2.2 of this Lease, as determined by the arbitrators.

2.2.4.4 The decision of the majority of the three arbitrators shall be binding upon Landlord and Tenant.

2.2.4.5 If either Landlord or Tenant fails to appoint an Advocate Arbitrator within twenty (20) days after the Outside Agreement Date, then either party may petition the presiding judge of the Superior Court of San Francisco County to appoint such Advocate Arbitrator subject to the criteria in Section 2.2.4.1 of this Lease, or if he or she refuses to act, either party may petition any judge having jurisdiction over the parties to appoint such Advocate Arbitrator.

2.2.4.6 If the two (2) Advocate Arbitrators fail to agree upon and appoint the Neutral Arbitrator within ten (10) business days after the appointment of the last appointed Advocate Arbitrator, then either party may petition the presiding judge of the Superior Court of San Francisco County to appoint the Neutral Arbitrator, subject to criteria in Section 2.2.4.2 of this Lease, or if he or she refuses to act, either party may petition any judge having jurisdiction over the parties to appoint such arbitrator.

2.2.4.7 The cost of the arbitration shall be paid by Landlord and Tenant equally.

2.2.4.8 In the event that the Option Rent shall not have been determined pursuant to the terms hereof prior to the commencement of the Option Term, Tenant shall be required to pay as Option Rent, an amount equal to 103% of the Base Rent payable by Tenant as of the expiration of the initial Lease Term, and upon the final determination of the Option Rent, the payments made by Tenant shall be reconciled with the actual amounts of Option Rent due, and the appropriate party shall make any corresponding payment to the other party.

ARTICLE3

BASE RENT

Tenant shall pay, without prior notice or demand, to Landlord or Landlord's agent at the management office of the Project, or, at Landlord's option, at such other place as Landlord may from time to time designate in writing, by a check for currency which, at the time of payment, is legal tender for private or public debts in the United States of America, base rent ("**Base Rent**") as set forth in Section 4 of the Summary, payable in equal monthly installments as set forth in Section 4 of the Summary in advance on or before the first day of each and every calendar month during the Lease Term, without any setoff or deduction whatsoever, except as expressly provided herein. The Base Rent for the first full month of the Lease Term which occurs after the expiration of any free rent period shall be paid at the time of Tenant's execution of this Lease. If any Rent payment date (including the Lease Commencement Date) falls on a day of the month other than the first day of such month or if any payment of Rent is for a period which is shorter than one month, the Rent for any fractional month shall accrue on a daily basis for the period from the date such payment is due to the end of such calendar month or to the end of the Lease Term at a rate per day which is equal to 1/365 of the applicable annual Rent. All other payments or adjustments required to be made under the terms of this Lease that require proration on a time basis shall be prorated on the same basis.

ARTICLE 4

ADDITIONAL RENT

4.1 **General Terms**. In addition to paying the Base Rent specified in Article 3 of this Lease, Tenant shall pay "**Tenant's Share**" of the annual "**Direct Expenses**" for each "**Expense Year**", as those terms are defined in Sections 4.2.6, 4.2.2, and 4.2.3, of this Lease, respectively. Such payments by Tenant, together with any and all other amounts payable by Tenant to Landlord pursuant to the terms of this Lease, are hereinafter collectively referred to as the "**Additional Rent**", and the Base Rent and the Additional Rent are herein collectively referred to as "**Rent**." All amounts due under this Article 4 as Additional Rent shall be payable for the same periods and in the same manner as the Base Rent. Without limitation on other obligations of Tenant which survive the expiration of the Lease Term, the obligations of Tenant to pay the Additional Rent for the Lease Term as provided for in this Article 4 shall survive the expiration of the Lease Term.

4.2 **Definitions of Key Terms Relating to Additional Rent**. As used in this Article 4, the following terms shall have the meanings hereinafter set forth:

4.2.1 "**Cost Pools**" shall have the meaning set forth in Section 4.3, below.

4.2.2 "**Direct Expenses**" shall mean "Operating Expenses" and "Tax Expenses."

4.2.3 "**Expense Year**" shall mean each calendar year in which any portion of the Lease Term falls, through and including the calendar year in which the Lease Term expires, provided that Landlord, upon notice to Tenant, may change the Expense Year from time to time to any other twelve (12) consecutive month period that is utilized consistently among the tenants of the Project, and, in the event of any such change, Tenant's Share of Direct Expenses shall be equitably adjusted for any Expense Year involved in any such change. Should this Lease commence or terminate at any time other than the first day of an Expense Year, Direct Expenses payable by Tenant with respect to the Expense Year in which this Lease commences or terminates, as the case may be, shall be prorated on the basis of the number of days this Lease was in effect during such Expense Year.

4.2.4 "**Operating Expenses**" shall mean all expenses, costs and amounts of every kind and nature which Landlord pays or accrues during any Expense Year because of or in connection with the ownership, management, maintenance, security, repair, replacement, restoration or operation of the Project, or any portion thereof. Without limiting the generality of the foregoing, Operating Expenses shall specifically include any and all of the following: (i) the cost of supplying all utilities, the cost of operating, repairing, maintaining, and renovating the utility, telephone, mechanical, sanitary, storm drainage, and elevator systems, and the cost of maintenance and service contracts in connection therewith; (ii) the cost of licenses, certificates, permits and inspections and the cost of contesting any governmental enactments which may affect Operating Expenses, and the costs incurred in connection with a governmentally mandated transportation system management program or similar program; (iii) the cost of all insurance carried by Landlord in connection with the Project as reasonably determined by Landlord; (iv) the cost of landscaping, relamping, and all supplies, tools, equipment and materials used in the operation, repair and maintenance of the Project, or any portion thereof; (v) the cost of parking area operation, repair, restoration, and maintenance; (vi) fees and other costs, including management and/or incentive fees, consulting fees, legal fees and accounting fees, of all contractors and consultants in connection with the management, operation, maintenance and repair of the Project; (vii) payments under any equipment rental agreements and the fair rental value of any management office space; (viii) subject to item (f), below, wages, salaries and other compensation and benefits, including taxes levied thereon, of all persons engaged in the operation, maintenance and security of the Project; (ix) costs under any instrument pertaining to the sharing of costs by the Project; (x) operation, repair, maintenance and replacement of all systems and equipment and components thereof of the Project; (xi) the cost of janitorial, alarm, security and other services, replacement of wall and floor coverings, ceiling tiles and fixtures in Common Areas, maintenance and replacement of curbs and walkways, repair to roofs and re-roofing; (xii) amortization (including interest on the unamortized cost) over such period of time as Landlord shall reasonably determine consistent with generally accepted real estate management and accounting principles, consistently applied, of the cost of acquiring or the rental expense of personal property used in the maintenance, operation and repair of the Project, or any portion thereof; (xiii) the cost of capital improvements or other costs incurred in connection with the Project (A) which are intended to effect economies in the operation or maintenance of the Project, or any portion thereof, or to reduce current or future Operating Expenses or to enhance the safety or security of the Project or its occupants, (B) that are required to comply with present or anticipated conservation programs, (C) which are replacements or modifications of nonstructural items located in the Building or Common Areas required to keep the Building Common Areas in good order or condition, (D) that are required under any governmental law or regulation first enacted or enforced after the Lease Commencement Date, or (E) are a Landlord Replacement Item as provided in Section 7.2, below; provided, however, that any capital expenditure shall be amortized (including interest on the amortized cost) over such period of time as Landlord shall reasonably determine; and (xiv) costs, fees, charges or assessments imposed by, or resulting from any mandate imposed on Landlord by, any federal, state or local government for fire and police protection, trash removal, community services, or other services which do not constitute "Tax Expenses" as that term is defined in Section 4.2.5, below, (xv) cost of tenant relation programs reasonably established by Landlord, and (xvi) payments under any easement, license, operating agreement, declaration, restrictive covenant, or instrument pertaining to the sharing of costs by the Building, including, without limitation, any covenants, conditions and restrictions affecting the property, and reciprocal easement agreements affecting the property, any parking licenses, and any agreements with transit agencies affecting the Property (collectively, **"Underlying Documents").** Notwithstanding the foregoing, for purposes of this Lease, Operating Expenses shall not, however, include:

(a) costs, including legal fees, space planners' fees, advertising and promotional expenses (except as otherwise set forth above), and brokerage fees incurred in connection with the original construction or development, or original or future leasing of the Project, and costs, including permit, license and inspection costs, incurred with respect to the installation of tenant improvements made for tenants other than Tenant or incurred in renovating or otherwise improving, decorating, painting or redecorating vacant space for tenants or other occupants of the Project (excluding, however, such costs relating to any Common Areas of the Project or parking facilities);

(b) except as set forth in items (xii), (xiii), and (xiv) above, depreciation, interest and principal payments on mortgages and other debt costs including, if any, penalties and interest, costs of capital repairs and alterations, and costs of capital improvements and equipment;

(c) costs for which the Landlord is reimbursed by any tenant or occupant of the Project or by insurance by its carrier or any tenant's carrier or by anyone else, and electric power costs for which any tenant directly contracts with the local public service company;

(d) any bad debt loss, rent loss, or reserves for bad debts or rent loss;

(e) costs associated with the operation of the business of the partnership or entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Project (which shall specifically include, but not be limited to, accounting costs associated with the operation of the Project). Costs associated with the operation of the business of the partnership or entity which constitutes the Landlord include costs of partnership accounting and legal matters, costs of defending any lawsuits with any mortgagee, costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Project, and costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Project management, or between Landlord and other tenants or occupants;

(f) the wages and benefits of any employee who does not devote substantially all of his or her employed time to the Project unless such wages and benefits are prorated to reflect time spent on operating and managing the Project vis-a-vis time spent on matters unrelated to operating and managing the Project; provided, that in no event shall Operating Expenses for purposes of this Lease include wages and/or benefits attributable to personnel above the level of Project manager;

(g) amount paid as ground rental for the Project by the Landlord;

(h) except for a Project management fee to the extent allowed pursuant to item (1) below, overhead and profit increment paid to the Landlord or to subsidiaries or affiliates of the Landlord for services in the Project to the extent the same exceeds the costs of such services rendered by qualified, first-class unaffiliated third parties on a competitive basis;

(i) any compensation paid to clerks, attendants or other persons in commercial concessions operated by the Landlord, provided that any compensation paid to any concierge at the Project shall be includable as an Operating Expense;

(j) rentals and other related expenses incurred in leasing air conditioning systems, elevators or other equipment which if purchased the cost of which would be excluded from Operating Expenses as a capital cost, except equipment not affixed to the Project which is used in providing engineering, janitorial or similar services and, further excepting from this exclusion such equipment rented or leased to remedy or ameliorate an emergency condition in the Project ;

(k) all items and services for which Tenant or any other tenant in the Project reimburses Landlord or which Landlord provides selectively to one or more tenants (other than Tenant) without reimbursement;

(I) any costs expressly excluded from Operating Expenses elsewhere in this Lease;

(m) costs arising from the gross negligence or willful misconduct of Landlord in connection with this Lease;

(n) costs incurred to comply with laws relating to the removal of hazardous material (as defined under applicable law) which was in existence in the Building or on the Project prior to the Lease Commencement Date, and was of such a nature that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions that it then existed in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto; and costs incurred to remove, remedy, contain, or treat hazardous material, which hazardous material is brought into the

Building or onto the Project after the date hereof by Landlord or any "Landlord Parties", as that term is defined in Section 10.1, below, or any other tenant of the Project and is of such a nature, at that time, that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions, that it then exists in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto;

(o) Costs of any items for which Landlord receives reimbursement from insurance proceeds or a third party. Insurance proceeds which reimburse Landlord for any casualty loss or damage which was previously passed through as an Operating Expense shall be deducted from Operating Expenses in the year in which they are received, except that any deductible amount under any insurance policy shall be included within Operating Expenses;

(p) Interest, principal, depreciation, attorney fees, costs of environmental investigations or reports, points, fees, and other lender costs and closing costs on any mortgage or mortgages, ground lease payments, or other debt instrument encumbering the Building or the Project;

(q) Interest or penalties resulting from late payment of any Operating Expense by Landlord due to Landlord's negligence or willful misconduct (unless Landlord in good faith disputes a charge and subsequently loses or settles that dispute); or

(r) Any amount payable by Landlord to any tenant resulting solely from Landlord's default in its obligations to that tenant;

(s) Wages, salaries, and other compensation paid to any executive employee of Landlord or Landlord's property manager above the grade of general or project manager for the Building or Project;

(t) Advertising and promotional expenditures primarily directed toward leasing tenant space in the Building or the Project and the costs of signs in or on the Building or the Project (except the Building and Project directories) identifying the owner of the Building or Project or any tenant of the Building or Project;

(u) Costs of initial construction, reconstruction, modification, alteration, or repair of the Building or any portion thereof due to faulty construction (other than by Tenant) or latent defects in that construction; or correcting defects in the Building or any equipment or fixtures appurtenant to, or used in, the Building; and

(v) Charitable or political contributions made by Landlord.

If the Project is not at least ninety-five percent (95%) occupied during all or a portion of any Expense Year, Landlord shall make an appropriate adjustment, in accordance with generally accepted real estate management and accounting principles, consistently applied, to the components of Operating Expenses which vary depending upon occupancy (e.g., janitorial service, trash collection, etc.) for such year to determine the amount of Operating Expenses that would have been incurred had the Project been ninety-five percent (95%) occupied; and the amount so determined shall be deemed to have been the amount of Operating Expenses for such year. In no event shall Landlord be entitled to recover more than 100% of the Operating Expenses actually paid during any Expense Year.

4.2.5 **Taxes**.

4.2.5.1 "**Tax Expenses**" shall mean all federal, state, county, or local governmental or municipal taxes, fees, charges or other impositions of every kind and nature, whether general, special, ordinary or extraordinary (including, without limitation, real estate taxes, general and special assessments, transit taxes, leasehold taxes or taxes based upon the receipt of rent, including gross receipts or sales taxes applicable to the receipt of rent, unless required to be paid by Tenant or any other tenant in the Project, personal property taxes

imposed upon the fixtures, machinery, equipment, apparatus, systems and equipment, appurtenances, furniture and other personal property owned by Landlord and used in connection with the Project, or any portion thereof), which shall be paid or accrued during any Expense Year (without regard to any different fiscal year used by such governmental or municipal authority) because of or in connection with the ownership, leasing and operation of the Project, or any portion thereof.

4.2.5.2 Tax Expenses shall include, without limitation: (i) Any tax on the rent, right to rent or other income from the Project, or any portion thereof, or as against the business of leasing the Project, or any portion thereof; (ii) Any assessment, tax, fee, levy or charge in addition to, or in substitution, partially or totally, of any assessment, tax, fee, levy or charge previously included within the definition of real property tax, it being acknowledged by Tenant and Landlord that Proposition 13 was adopted by the voters of the State of California in the June 1978 election ("**Proposition 13**") and that assessments, taxes, fees, levies and charges may be imposed by governmental agencies for such services as fire protection, street, sidewalk and road maintenance, refuse removal and for other governmental services formerly provided without charge to property owners or occupants, and, in further recognition of the decrease in the level and quality of governmental services and amenities as a result of Proposition 13, Tax Expenses shall also include any governmental or private assessments or the Project's contribution towards a governmental or private cost-sharing agreement for the purpose of augmenting or improving the quality of services and amenities normally provided by governmental agencies; (iii) Any assessment, tax, fee, levy, or charge allocable to or measured by the area of the Premises or the Rent payable hereunder, including, without limitation, any business or gross income tax or excise tax with respect to the receipt of such rent, or upon or with respect to the possession, leasing, operating, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises, or any portion thereof; and (iv) Any assessment, tax, fee, levy or charge, upon this transaction or any document to which Tenant is a party, creating or transferring an interest or an estate in the Premises or the improvements thereon.

4.2.5.3 Any reasonable out-of-pocket costs and expenses (including, without limitation, reasonable attorneys' and consultants' fees) incurred in attempting to protest, reduce or minimize Tax Expenses shall be included in Tax Expenses in the Expense Year such expenses are incurred, not to exceed the amount of savings resulting from such effort to contest the amount or validity of such Tax Expenses. Tax refunds shall be credited against Tax Expenses and refunded to Tenant regardless of when received, based on the Expense Year to which the refund is applicable, provided that in no event shall the amount to be refunded to Tenant for any such Expense Year exceed the total amount paid by Tenant as Additional Rent under this Article 4 for such Expense Year. If Tax Expenses for any period during the Lease Term or any extension thereof are increased after payment thereof for any reason, including, without limitation, error or reassessment by applicable governmental or municipal authorities, Tenant shall pay Landlord within ten (10) business days after demand, Tenant's Share of any such increased Tax Expenses. Notwithstanding anything to the contrary contained in this Section 4.2.5 , there shall be excluded from Tax Expenses (i) all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord's general or net income (as opposed to rents, receipts or income attributable to operations at the Project), (ii) any items included as Operating Expenses and any items excluded from Operating Expenses, (iii) any items paid by Tenant under Section 4.5 of this Lease; (iv) special assessments or special taxes imposed as a means of financing improvements to the Project and the surrounding areas, and (v) Tax Expenses not allocable to any Expense Year. The foregoing provisions shall survive the expiration or sooner termination of this Lease.

4.2.6 "**Tenant's Share**" shall mean the percentage set forth in Section 6 of the Summary, which is based on the square footage of the Premises divided by the aggregate area of 628,937 square feet for all of the buildings located in the Project. If the square footage of the Project changes, Tenant's Share shall be appropriately and equitably adjusted. The square footage of new additions or buildings shall be measured using the same measurement method as was used in determining the square footage measurements for the Premises.

4.3 **Cost Pools**. Landlord shall have the right, from time to time, to equitably allocate some or all of the Direct Expenses for the Project among different portions or occupants of the Project (the "**Cost Pools**"), in Landlord's reasonable discretion. The Direct Expenses within each such Cost Pool shall be allocated and charged to the tenants within such Cost Pool in an equitable manner.

4.4 **Calculation and Payment of Additional Rent.** Tenant shall pay to Landlord, in the manner set forth in Section 4.4.1, below, and as Additional Rent, Tenant's Share of Direct Expenses for each Expense Year.

4.4.1 **Statement of Actual Direct Expenses and Payment by Tenant.** Landlord shall give to Tenant within six (6) months following the end of each Expense Year, a statement (the **"Statement")** which shall state the Direct Expenses incurred or accrued for such preceding Expense Year, and which shall indicate the amount of Tenant's Share of Direct Expenses. Upon receipt of the Statement for each Expense Year commencing or ending during the Lease Term, Tenant shall pay, with its next installment of Base Rent that is due at least fifteen (15) days after receipt of such Statement, the full amount of Tenant's Share of Direct Expenses for such Expense Year, less the amounts, if any, paid during such Expense Year as **"Estimated Direct Expenses,"** as that term is defined in Section 4.4.2, below, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Tenant shall receive a credit in the amount of Tenant's overpayment against Rent next due under this Lease. The failure of Landlord to timely furnish the Statement for any Expense Year shall not prejudice Landlord or Tenant from enforcing its rights under this Article 4. Even though the Lease Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Share of Direct Expenses for the Expense Year in which this Lease terminates, Tenant shall, within fifteen (15) days of its receipt of the Statement for such Expense Year, pay to Landlord such amount, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Landlord shall, within thirty (30) days, deliver a check payable to Tenant in the amount of the overpayment. The provisions of this Section 4.4.1 shall survive the expiration or earlier termination of the Lease Term.

4.4.2 **Statement of Estimated Direct Expenses.** In addition, Landlord shall give Tenant within six (6) months after the end of each Expense Year a yearly expense estimate statement (the **"Estimate Statement")** which shall set forth Landlord's reasonable estimate (the **"Estimate")** of what the total amount of Direct Expenses for the then-current Expense Year shall be and the estimated Tenant's Share of Direct Expenses (the **"Estimated Direct Expenses").** The failure of Landlord to timely furnish the Estimate Statement for any Expense Year shall not preclude Landlord from enforcing its rights to collect any Estimated Direct Expenses under this Article 4, nor shall Landlord be prohibited from revising any Estimate Statement or Estimated Direct Expenses theretofore delivered to the extent necessary. Thereafter, Tenant shall pay, with its next installment of Base Rent that is due at least fifteen (15) days after receipt of such Statement, a fraction of the Estimated Direct Expenses for the then-current Expense Year (reduced by any amounts paid pursuant to the last sentence of this Section 4.4.2). Such fraction shall have as its numerator the number of months which have elapsed in such current Expense Year, including the month of such payment, and twelve (12) as its denominator. Until a new Estimate Statement is furnished (which Landlord shall have the right to deliver to Tenant at any time), Tenant shall pay monthly, with the monthly Base Rent installments, an amount equal to one-twelfth (1/12) of the total Estimated Direct Expenses set forth in the previous Estimate Statement delivered by Landlord to Tenant.

4.5 **Taxes and Other Charges for Which Tenant Is Directly Responsible.**

4.5.1 Tenant shall be liable for and shall pay before delinquency, taxes levied against Tenant's equipment, furniture, fixtures and any other personal property located in or about the Premises. If any such taxes on Tenant's equipment, furniture, fixtures and any other personal property are levied against Landlord or Landlord's property or if the assessed value of Landlord's property is increased by the inclusion therein of a value placed upon such equipment, furniture, fixtures or any other personal property and if Landlord pays the taxes based upon such increased assessment, which Landlord shall have the right to do regardless of the validity thereof but only under proper protest if requested by Tenant, Tenant shall within ten (10) business days after demand repay to Landlord the taxes so levied against Landlord or the proportion of such taxes resulting from such increase in the assessment, as the case may be.

4.5.2 Notwithstanding any contrary provision herein, Tenant shall pay prior to delinquency any (i) rent tax or sales tax, service tax, transfer tax or value added tax, or any other applicable tax on the rent or services herein or otherwise respecting this Lease, (ii) taxes assessed upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion of the Project, including the Project parking facility; or (iii) taxes assessed upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

4.6 **Triple Net Lease**. Landlord and Tenant acknowledge that, except as otherwise provided to the contrary in this Lease, it is their intent and agreement that this Lease be a "**TRIPLE NET**" lease and that as such, the provisions contained in this Lease are intended to pass on to Tenant or reimburse Landlord for the costs and expenses reasonably associated with this Lease and the Project, and Tenant's operation therefrom. To the extent such costs and expenses payable by Tenant cannot be charged directly to, and paid by, Tenant, such costs and expenses shall be paid by Landlord but reimbursed by Tenant as Additional Rent as provided herein.

4.7 **Allocation of Direct Expenses**. The parties acknowledge that the Building is a part of a multi- building project and that the costs and expenses incurred in connection with the Project (i.e., the Direct Expenses) should be shared between the tenants of the Building and the tenants of the other buildings in the Project. Accordingly, although Tenant's Share is determined based on the Project as a whole, certain of the Direct Expenses, which portion shall be reasonably determined by Landlord on an equitable basis, shall be allocated solely to the tenants of the Building (as opposed to the tenants of any other buildings in the Project), while other Direct Expenses are allocated to the Project as a whole, all as reasonably determined by Landlord.

4.8 **Landlord's Books and Records**. Within six (6) months after receipt of a Statement by Tenant, if Tenant disputes the amount of Additional Rent set forth in the Statement, Tenant or an independent certified public accountant (which accountant is a member of a nationally recognized accounting firm and is not working on a contingency fee basis) ("**Tenant's Accountant**"), designated and paid for by Tenant, may, after reasonable notice to Landlord and at reasonable times, inspect and audit Landlord's records with respect to the Statement at Landlord's offices, provided that there is no existing Event of Default and Tenant has paid all amounts required to be paid under the applicable Estimate Statement and Statement, as the case may be. In connection with such inspection, Tenant and Tenant's agents must agree in advance to follow Landlord's reasonable rules and procedures regarding inspections of Landlord's records, and shall execute a commercially reasonable confidentiality agreement regarding such inspection. Tenant's failure to dispute the amount of Additional Rent set forth in any Statement within six (6) months of Tenant's receipt of such Statement shall be deemed to be Tenant's approval of such Statement and Tenant, thereafter, waives the right or ability to dispute the amounts set forth in such Statement. If after such inspection, Tenant still disputes such Additional Rent, a determination as to the proper amount shall be made, at Tenant's expense, by an independent certified public accountant (the "**Accountant**") selected by Landlord and subject to Tenant's reasonable approval; provided that if such determination by the Accountant proves that Direct Expenses were overstated by more than three percent (3%), then the cost of the Accountant and the cost of such determination shall be paid for by Landlord. In the event that the Accountant determines that Tenant has been overcharged for Additional Rent for the Expense Year at issue, Landlord shall refund the amount of such overcharge to Tenant within thirty (30) days of such determination. Tenant hereby acknowledges that Tenant's sole right to inspect Landlord's books and records and to contest the amount of Direct Expenses payable by Tenant shall be as set forth in this Section 4.6, and Tenant hereby waives any and all other rights pursuant to applicable law to inspect such books and records and/or to contest the amount of Direct Expenses payable by Tenant.

ARTICLE 5

USE OF PREMISES

5.1 **Permitted Use**. Tenant shall use the Premises solely for the Permitted Use set forth in Section 7 of the Summary and Tenant shall not use or permit the Premises or the Project to be used for any other purpose or purposes whatsoever without the prior written consent of Landlord, which may be withheld in Landlord's sole discretion.

5.2 **Prohibited Uses**. Tenant further covenants and agrees that Tenant shall not use, or suffer or permit any person or persons to use, the Premises or any part thereof for any use or purpose contrary to the provisions of any reasonable rules or regulations promulgated by Landlord with respect to the use and operation of the Project, as consistently applied to all tenants, or in violation of the laws of the United States of America, the State of California, or the ordinances, regulations or requirements of the local municipal or county governing body or other lawful authorities having jurisdiction over the Project) including, without limitation, any such laws, ordinances, regulations or requirements relating to hazardous materials or substances, as those terms are defined by applicable laws now or hereafter in effect, or any Underlying Documents now in effect. Tenant shall not do or

permit anything to be done in or about the Premises which will in any way unreasonably obstruct or interfere with the rights of other tenants or occupants of the Building, or injure or unreasonably annoy them or use or allow the Premises to be used for any unlawful purpose, nor shall Tenant cause, maintain or permit any nuisance in, on or about the Premises. Tenant shall comply with, and Tenant's rights and obligations under the Lease and Tenant's use of the Premises shall be subject and subordinate to, all recorded easements, covenants, conditions, and restrictions now affecting the Project. Further, Tenant shall comply with, and Tenant's rights and obligations under the Lease and Tenant's use of the Premises shall be subject and subordinate to, any easement, covenant, condition, or restriction affecting the Project that is recorded after the date hereof, but only if complying therewith or being subject and subordinate thereto does not materially restrict Tenant's access to the Premises or materially interfere with Tenant's use and occupancy of the Premises.

5.3 **Intentionally Omitted.**

5.4 **Hazardous Materials.**

5.4.1 **Tenant's Obligations.**

5.4.1.1 **Prohibitions.** As a material inducement to Landlord to enter into this Lease with Tenant, Tenant has fully and accurately completed Landlord's Pre-Leasing Environmental Exposure Questionnaire (the **"Environmental Questionnaire"),** which is attached as **Exhibit G.** Tenant hereby represents, warrants and covenants that except for those chemicals or materials, and their respective quantities, specifically listed on the Environmental Questionnaire, neither Tenant nor Tenant's employees, contractors and subcontractors of any tier, or any entity acting as an agent or sub-agent of Tenant (collectively, **"Tenant's Agents")** will produce, use, store or generate any "Hazardous Materials," as that term is defined below, on, under or about the Premises, nor cause or permit any Hazardous Material to be brought upon, placed, stored, manufactured, generated, blended, handled, recycled, used or "Released," as that term is defined below, on, in, under or about the Premises. If any information provided to Landlord by Tenant on the Environmental Questionnaire is false, incomplete, or misleading in any material respect, the same shall be deemed a default by Tenant under this Lease. Upon Landlord's written request, or at such time as Tenant's use of Hazardous Materials has changed, Tenant shall deliver to Landlord an updated Environmental Questionnaire. Landlord's prior written consent shall be required to any Hazardous Materials use in the Premises not described on the initial Environmental Questionnaire, such consent to be withheld in Landlord's sole discretion, provided that Landlord will not unreasonably withhold, condition or delay its consent if such use is necessitated by a change in Tenant's business operations and is otherwise in keeping with the Permitted Use. Tenant shall not install or permit (other than existing on the date hereof) any underground storage tank on the Premises. In addition, Tenant agrees that it: (i) shall not cause or suffer to occur, the Release of any Hazardous Materials at, upon, under or within the Premises or any contiguous or adjacent premises except in accordance with all Environmental Laws; and (ii) shall not engage in activities at the Premises involving Hazardous Materials that are reasonably likely to result in, give rise to, or lead to the imposition of liability upon Tenant or Landlord or the creation of an environmental lien or use restriction upon the Premises. For purposes of this Lease, **"Hazardous Materials"** means all flammable explosives, petroleum and petroleum products, waste oil, radon, radioactive materials, toxic pollutants, asbestos, polychlorinated biphenyls **("PCBs"),** medical waste, chemicals known to cause cancer or reproductive toxicity, pollutants, contaminants, hazardous wastes, toxic substances or related materials, including without limitation any chemical, element, compound, mixture, solution, substance, object, waste or any combination thereof, which is or may be hazardous to human health, safety or to the environment due to its radioactivity, ignitability, corrosiveness, reactivity, explosiveness, toxicity, carcinogenicity, infectiousness or other harmful or potentially harmful properties or effects, or defined as, regulated as or included in, the definition of "hazardous substances," "hazardous wastes," "hazardous materials," or "toxic substances" under any Environmental Laws. The term "Hazardous Materials" for purposes of this Lease shall also include any mold, fungus or spores, whether or not the same is defined, listed, or otherwise classified as a "hazardous material" under any Environmental Laws, if such mold, fungus or spores may pose a risk to human health or the environment or negatively impact the value of the Premises. Hazardous Materials shall not include de minimis quantities of commonly used office or other cleaning supplies used in accordance with applicable laws. For purposes of this Lease, **"Release" or "Released" or "Releases"** shall mean any release, deposit, discharge, emission, leaking, spilling, seeping, migrating, injecting, pumping, pouring, emptying, escaping, dumping, disposing, or other movement of Hazardous Materials into the environment.

5.4.1.2 **Notices to Landlord**. Unless Tenant is required by applicable laws to give earlier notice to Landlord, Tenant shall notify Landlord in writing as soon as possible but in no event later than five (5) days after Tenant becomes aware of (i) the occurrence of any actual, alleged or threatened Release of any Hazardous Material in, on, under, from, about or in the vicinity of the Premises (whether past or present) in violation of any Environmental Law, regardless of the source or quantity of any such Release, or (ii) any regulatory actions, inquiries, inspections, investigations, directives, or any cleanup, compliance, enforcement or abatement proceedings (including any threatened or contemplated investigations or proceedings) relating to Hazardous Materials affecting or potentially affecting the Premises, or (iii) any claims by any person or entity relating to any Hazardous Materials in, on, under, from, about or in the vicinity of the Premises, whether relating to damage, contribution, cost recovery, compensation, loss or injury. Collectively, the matters set forth in clauses (i), (ii) and (iii) above are hereinafter referred to as "**Hazardous Materials Claims**". Tenant shall promptly forward to Landlord copies of all orders, notices, permits, applications and other communications and reports received by Tenant in connection with any Hazardous Materials Claims. Additionally, Tenant shall promptly advise Landlord in writing of Tenant's discovery of any occurrence or condition on, in, under or about the Premises that could subject Tenant or Landlord to any liability, or restrictions on ownership, occupancy, transferability or use of the Premises under any "Environmental Laws," as that term is defined below. Tenant shall not enter into any legal proceeding or other action, settlement, consent decree or other compromise with respect to any Hazardous Materials Claims without first notifying Landlord of Tenant's intention to do so and affording Landlord the opportunity to join and participate, as a party if Landlord so elects, in such proceedings and in no event shall Tenant enter into any agreements in connection therewith which are binding on Landlord or the Premises without Landlord's prior written consent. Landlord shall have the right to appear at and participate in, any and all legal or other administrative proceedings concerning any Hazardous Materials Claim. For purposes of this Lease, "**Environmental Laws**" means all applicable present and future laws relating to Hazardous Materials or to environmental compliance, contamination or cleanup, including, without limitation, all requirements pertaining to reporting, licensing, permitting, investigation and/or remediation of emissions, discharges, Releases, or threatened Releases of Hazardous Materials, whether solid, liquid, or gaseous in nature, into the air, surface water, groundwater, or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of Hazardous Materials. Environmental Laws include, but are not limited to, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 USC§ 9601, et seq., the Hazardous Materials Transportation Authorization Act of 1994, 49 USC§ 5101 , et seq., the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and Hazardous and Solid Waste Amendments of 1984, 42 USC§ 6901, et seq. , the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, 33 USC § 1251 , et seq., the Clean Air Act of 1966, 42 USC § 7401, et seq., the Toxic Substances Control Act of 1976, 15 USC § 2601, et seq., the Safe Drinking Water Act of 1974, 42 USC §§ 300f through 300j, the Occupational Safety and Health Act of 1970, as amended, 29 USC§ 651 et seq., the Oil Pollution Act of 1990, 33 USC § 2701 et seq., the Emergency Planning and Community Right-To-Know Act of 1986, 42 USC § 11001 et seq., the National Environmental Policy Act of 1969, 42 USC§ 4321 et seq., the Federal Insecticide, Fungicide and Rodenticide Act of 1947, 7 USC § 136 et seq., California Carpenter-Presley-Tanner Hazardous Substance Account Act, California Health & Safety Code §§ 25300 et seq., Hazardous Materials Release Response Plans and Inventory Act, California Health & Safety Code, §§ 25500 et seq., Underground Storage of Hazardous Substances provisions, California Health & Safety Code, §§ 25280 et seq., California Hazardous Waste Control Law, California Health & Safety C ode, §§ 25100 et seq., and any other state or local law counterparts, as amended, as such applicable laws, are in effect as of the Lease Commencement Date, or thereafter adopted, published, or promulgated.

5.4.1.3 **Releases of Hazardous Materials**. If Tenant or Tenant's employees, contractors and subcontractors of any tier, or any entity acting as an agent or sub-agent of Tenant (collectively, "**Tenant Parties**") causes any Release of any Hazardous Material in, on, under, from or about the Premises except in accordance with all Environmental Laws at any time during the Lease and/or if any other Hazardous Material condition caused by Tenant or Tenant Parties exists at the Premises that requires response actions of any kind under any Environmental Law, in addition to notifying Landlord as specified above, Tenant, at its own sole cost and expense, shall (i) immediately comply with any and all reporting requirements imposed pursuant to any and all Environmental Laws, (ii) provide a written certification to Landlord indicating that Tenant has complied with all applicable reporting requirements, (iii) take any and all necessary investigation, corrective and remedial action in accordance with any and all applicable Environmental Laws, utilizing an environmental consultant approved by Landlord, all in accordance with the provisions and requirements of this **Section 5.4**, including, without limitation,

Section 5.4.4, and (iv) take any such additional investigative, remedial and corrective actions as Landlord shall in its reasonable discretion deem necessary in connection with such Release or other Hazardous Material condition, all in accordance with the provisions and requirements of this **Section 5.4**. Landlord may, as required by any and all Environmental Laws, report the Release of any Hazardous Material to the appropriate governmental authority, and, if applicable, identifying Tenant as the responsible party. Tenant shall deliver to Landlord copies of all administrative orders, notices, demands, directives or other communications directed to Tenant from any governmental authority with respect to any Release of Hazardous Materials in, on, under, from, or about the Premises, together with copies of all investigation, assessment, and remediation plans and reports prepared by or on behalf of Tenant in response to any such regulatory order or directive.

5.4.1.4 **Indemnification**.

5.4.1.4.1 **In General**. Without limiting in any way Tenant's obligations under any other provision of this Lease, Tenant shall be solely responsible for and shall protect, defend, indemnify and hold the Landlord Parties harmless from and against any and all claims, judgments, losses, damages, costs, expenses, penalties, enforcement actions, taxes, fines, remedial actions, liabilities (including, without limitation, actual attorneys' fees, litigation, arbitration and administrative proceeding costs, expert and consultant fees and laboratory costs) including, without limitation, consequential damages and sums paid in settlement of claims, which arise during or after the Lease Term in whole or in part, foreseeable or unforeseeable, directly or indirectly arising out of or attributable to the presence, use, generation, manufacture, treatment, handling, refining, production, processing, storage, Release or presence of Hazardous Materials caused by Tenant or any Tenant Parties in, on, under or about the Premises, except to the extent such liabilities result from the negligence or willful misconduct of Landlord or acts or omissions of other tenants. The foregoing obligations of Tenant shall include, without limitation: (i) the costs of any removal, repair, cleanup or remediation of the Premises, and the preparation and implementation of any closure, removal, remedial or other required plans, as and to the extent required by Environmental Laws; (ii) judgments for personal injury or property damages; and (iii) all costs and expenses incurred by Landlord in connection therewith. Notwithstanding anything herein to the contrary, it is the express intention of the parties to this Lease and Landlord hereby agrees that Tenant shall have no liability or responsibility whatsoever for Hazardous Materials which (A) existed in, on, under or about the Premises, Building or Project prior to the Lease Commencement Date, or (B) are attributable to the presence, use, generation, manufacture, treatment, handling, refining, production, processing, storage, Release or presence of Hazardous Materials by any person or entity other than Tenant or any Tenant Parties (collectively, "**Existing Hazardous Materials**").

5.4.1.4.2 **Limitations**. Notwithstanding anything in this **Section 5.4.1.4**, above, to the contrary, Tenant's indemnity of Landlord as set forth in **Section 5.4.1.4.1**, above, shall not be applicable to claims by third party property owners based upon the migration of Existing Hazardous Materials from the Premises to the land of third party property owners, except to the extent that Tenant's construction activities and/or Tenant's other acts or omissions caused or exacerbated the subject claim. Further, if prior to commencing any construction at the Premises, Tenant provides Landlord with reasonable evidence of potential liability to any third party under the indemnity provided for under **Section 5.4.1.4.1**, above, based upon Existing Hazardous Materials that create an unreasonable safety or health risk, in excess of $250,000.00 (that is not insured or required to be insured against by Tenant), Tenant may, subject to the remaining terms hereof, terminate this Lease by notice to Landlord (the "**Indemnity Termination Notice**") delivered concurrently with Tenant's delivery of the evidence required hereunder; provided, however, that in the event that Landlord shall, at Landlord's option within thirty (30) business days following its receipt of the Indemnity Termination Notice, delivers notice to Tenant (the "**Indemnity Waiver Notice**") waiving its right to indemnification related to the subject claim with respect to the portion thereof that is not insured or required to be insured and that exceeds $250,000.00, then the Indemnity Termination Notice shall be void and this Lease shall continue in full force and effect, except as modified with respect to the subject claim by Landlord's Indemnity Waiver Notice.

5.4.1.5 **Compliance with Environmental Laws**. Without limiting the generality of Tenant's obligation to comply with applicable laws as and to the extent otherwise provided in this Lease, Tenant

shall, at its sole cost and expense, comply with all Environmental Laws in its use of the Premises. Tenant shall obtain and maintain any and all necessary permits, licenses, certifications and approvals appropriate or required for the use, handling, storage, and disposal of any Hazardous Materials used, stored, generated, transported, handled, blended, or recycled by Tenant on the Premises. Landlord shall have a continuing right, without obligation, to require Tenant to obtain, and to review and inspect any and all such permits, licenses, certifications and approvals, together with copies of any and all existing Hazardous Materials management plans and programs, any and all existing Hazardous Materials risk management and pollution prevention programs, and any and all existing Hazardous Materials emergency response and employee training programs respecting Tenant's use of Hazardous Materials. Upon request of Landlord, Tenant shall deliver to Landlord a narrative description explaining the nature and scope of Tenant's activities involving Hazardous Materials and showing to Landlord's reasonable satisfaction compliance with all Environmental Laws and the terms of this Lease. Tenant shall maintain a current Materials Safety Data Sheet ("**MSDS**") with respect to each material for which an MSDS is required by applicable Environmental Laws, and shall provide to Landlord copies of all such MSDSs promptly upon Landlord's request.

5.4.2 **Assurance of Performance**.

5.4.2.1 **Environmental Assessments In General**. Landlord may, but shall not be required to, engage from time to time such contractors as Landlord determines to be appropriate to perform "**Environmental Assessments**," as that term is defined below, to ensure Tenant's compliance with the requirements of this Lease with respect to Hazardous Materials. For purposes of this Lease, "Environmental Assessment" means an assessment including, without limitation: (i) an environmental site assessment conducted in accordance with the then-current standards of the American Society for Testing and Materials and meeting the requirements for satisfying the "all appropriate inquiries" requirements; and (ii) sampling and testing of the Premises based upon potential recognized environmental conditions or areas of concern or inquiry identified by the environmental site assessment, including, without limitation: (a) an asbestos survey conducted according to the standards of the Asbestos Hazard Emergency Response Act protocol; (b) testing of any transformers on the Premises for PCBs; (c) testing for lead-based paints; (d) soil and groundwater sampling to measure the effect of any actual or suspected release or discharge of Hazardous Materials on the Premises; and (e) such other sampling and testing reasonably necessary to determine the environmental condition of the Premises.

5.4.2.2 **Costs of Environmental Assessments**. All costs and expenses incurred by Landlord in connection with any such Environmental Assessment initially shall be paid by Landlord; provided that if any such Environmental Assessment shows that Tenant has failed to comply with the provisions of this **Section 5.4** in any material respect, then all of the reasonable costs and expenses of such Environmental Assessment shall be reimbursed by Tenant as Additional Rent within ten (10) days after receipt of written demand therefor.

5.4.2.3 **Other Matters**. Each Environmental Assessment conducted by Landlord shall be conducted: (i) only after Landlord has provided to Tenant notice reasonably detailing the extent of Landlord's access requirement at least ten (10) days prior to the date of such Environmental Assessment; and (ii) in a manner reasonably designed to minimize the interruption of Tenant's use of the Premises. Tenant shall have the right to reasonably approve the timing of Landlord's entry onto the Premises in order to minimize the interruption of Tenant's use of the Premises. Landlord shall repair any damage caused by the performance of the Environmental Assessment, and shall restore the Premises to the condition existing immediately prior to the Environmental Assessment.

5.4.3 **Intentionally Omitted**.

5.4.4 **Clean-up**.

5.4.4.1 **Environmental Reports; Clean-Up**. If any written report, including any report containing results of any Environmental Assessment (an "Environmental Report") shall indicate (i) the presence of any Hazardous Materials as to which Tenant has a removal or remediation obligation under this **Section 5.4**, and (ii) that as a result of same, the investigation, characterization, monitoring, assessment, repair, closure, remediation, removal, or other clean-up (the "**Clean-up**") of any Hazardous Materials is required under applicable Environmental Laws, Tenant shall immediately prepare and submit to Landlord within thirty (30) days after receipt of the

Environmental Report a comprehensive plan, subject to Landlord's written approval, specifying the actions to be taken by Tenant to perform the Clean-up so that the Premises are restored to the conditions required by this Lease. Upon Landlord's approval of the Clean-up plan, Tenant shall, at Tenant's sole cost and expense, without limitation on any rights and remedies of Landlord under this Lease, immediately implement such plan with a consultant reasonably acceptable to Landlord and proceed to Clean-Up Hazardous Materials in accordance with all applicable laws and as required by such plan and this Lease. If, Tenant fails either, (a) with respect to any Clean-up that can be completed within thirty (30) days after receiving a copy of such Environmental Report, to complete such Clean-up within such thirty-day period, or (b) with respect to any Clean-up that cannot be completed within such thirty-day period, to proceed with diligence to prepare the Clean-up plan and complete the Clean-up as promptly as practicable, then Landlord shall have the right, but not the obligation, and without waiving any other rights under this Lease, to carry out any Clean-up recommended by the Environmental Report or required by any governmental authority having jurisdiction over the Premises, and recover all of the costs and expenses thereof from Tenant as Additional Rent, payable within ten (10) days after receipt of written demand therefor.

5.4.4.2 **No Rent Abatement.** Tenant shall continue to pay all Rent due or accruing under this Lease during any Clean-up, and shall not be entitled to any reduction, offset or deferral of any Base Rent or Additional Rent due or accruing under this Lease during any such Clean-up.

5.4.4.3 **Surrender of Premises.** Tenant shall complete any Clean-up prior to surrender of the Premises upon the expiration or earlier termination of this Lease, and shall fully comply with all Environmental Laws and requirements of any governmental authority with respect to such completion, including, without limitation, fully comply with any requirement to file a risk assessment, mitigation plan or other information with any such governmental authority in conjunction with the Clean-up prior to such surrender. Tenant shall obtain and deliver to Landlord a letter or other written determination from the overseeing governmental authority confirming that the Clean-up has been completed in accordance with all requirements of such governmental authority **("Closure Letter").** Upon the expiration or earlier termination of this Lease, Tenant shall also be obligated to close all permits obtained in connection with Hazardous Materials in accordance with applicable laws.

5.4.4.4 **Failure to Timely Clean-Up.** Should any Clean-up for which Tenant is responsible not be completed, or should Tenant not receive a closure letter and any governmental approvals as and to the extent required under Environmental Laws in conjunction with such Clean-up prior to the expiration or earlier termination of this Lease, then Tenant shall be a holdover tenant (as more particularly provided in **Article 16)** until Tenant has fully complied with its obligations under this **Section 5.4.**

5.4.5 **Confidentiality.** Unless compelled to do so by applicable law, Tenant agrees that Tenant shall not disclose, discuss, disseminate or copy any information, data, findings, communications, conclusions and reports regarding the environmental condition of the Premises to any Person (other than Tenant's consultants, attorneys, property managers and employees that have a need to know such information), including any governmental authority, without the prior written consent of Landlord. In the event Tenant reasonably believes that disclosure is compelled by applicable law, it shall provide Landlord ten (10) days' advance notice of disclosure of confidential information so that Landlord may attempt to obtain a protective order. Tenant may additionally release such information (i) to Project Management Advisors, Inc., (ii) to bona fide prospective purchasers or lenders, subject to any such parties' written agreement to be bound by the terms of this **Section 5.4.5** or (iii) in connection with any enforcement of the terms of this Lease in any legal or arbitration proceeding.

5.4.6 **Copies of Environmental Reports.** Within thirty (30) days of receipt thereof, Tenant shall provide Landlord with a copy of any and all environmental assessments, audits, studies and reports regarding Tenant's activities with respect to the Premises, or ground water beneath the Land, or the environmental condition or Clean-up thereof. Tenant shall be obligated to provide Landlord with a copy of such materials without regard to whether such materials are generated by Tenant or prepared for Tenant, or how Tenant comes into possession of such materials.

5.4.7 **Signs, Response Plans, Etc.** Tenant shall be responsible for posting on the Premises any signs required under applicable Environmental Laws in connection with Tenant's use of the Premises or obligations under this Section 5.4. Tenant shall also complete and file any business response plans or inventories required by

any applicable laws in connection with Tenant's use of the Premises or obligations under this Section 5.4. Tenant shall concurrently file a copy of any such business response plan or inventory with Landlord.

5.4.8 Survival. Each covenant, agreement, representation, warranty and indemnification made by Tenant set forth in this **Section 5.4** shall survive the expiration or earlier termination of this Lease and shall remain effective until all of Tenant's obligations under this **Section 5.4** have been completely performed and satisfied.

ARTICLE 6

SERVICES AND UTILITIES

6.1 **In General**. Tenant shall, at its sole cost and expense, arrange and pay for all services and utilities serving the Premises, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone, janitorial and interior Building security services.

6.1.1 Electrical service shall be separately metered at the Premises and paid directly by Tenant to the utility provider. If separate metering is not available, then electrical service shall be sub-metered to the Premises, and reimbursed by Tenant to Landlord as Additional Rent.

6.1.2 Landlord shall not provide janitorial services for the Premises. Tenant shall be solely responsible for performing all janitorial services and other cleaning of the Premises, all in compliance with applicable laws. The janitorial and cleaning of the Premises shall be adequate to maintain the Premises in a manner consistent with Comparable Buildings.

Tenant shall cooperate fully with Landlord at all times and abide by all reasonable regulations and requirements that Landlord may prescribe for the proper functioning and protection of the HV AC, electrical, mechanical and plumbing systems. Provided that Landlord agrees to provide and maintain and keep in continuous service utility connections to the Project, including electricity, water and sewage connections, Landlord shall have no obligation to provide any services or utilities to the Building, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone,janitorial and interior Building security services.

6.2 **Interruption of Use**. Tenant agrees that Landlord shall not be liable for damages, by abatement of Rent or otherwise, for failure to furnish or delay in furnishing any service (including telephone and telecommunication services), or for any diminution in the quality or quantity thereof, when such failure or delay or diminution is occasioned, in whole or in part, by breakage, repairs, replacements, or improvements, by any strike, lockout or other labor trouble, by inability to secure electricity, gas, water, or other fuel at the Building or Project after reasonable effort to do so, by any riot or other dangerous condition, emergency, accident or casualty whatsoever, by act or default of Tenant or other parties, or by any other cause beyond Landlord's reasonable control; and such failures or delays or diminution shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any of the services or utilities as set forth in this Article 6.

6.3 **Failure of Services**. In the event that Tenant is prevented from using, and does not use, the Premises or any portion thereof, as a result of (i) any repair, maintenance or alteration performed by Landlord, or which Landlord failed to perform, after the Lease Commencement Date and required by the Lease, which substantially interferes with Tenant's use of the Premises, or (ii) the failure of services or utilities to the Premises due to a cause within the reasonable control of Landlord (either such set of circumstances as set forth in items (i) or (ii), above, to be known as an "**Abatement Event**"), then Tenant shall give Landlord notice of such Abatement Event, and if such Abatement Event continues for three (3) consecutive business days after Landlord's receipt of any such notice (the "**Eligibility Period**"), then the Base Rent and Tenant's Share of Direct Expenses shall be abated or reduced, as the case may be, after expiration of the Eligibility Period for such time that Tenant continues to be so

prevented from using, and does not use, the Premises or a portion thereof, in the proportion that the rentable area of the portion of the Premises that Tenant is prevented from using, and does not use, bears to the total rentable area of the Premises.

ARTICLE 7

REPAIRS AND MAINTENANCE

7.1 **General**. Tenant shall, at Tenant's own expense, keep and maintain the interior and non-structural portions of the Premises, including all improvements, fixtures, furnishings, and systems and equipment therein (including, without limitation, plumbing fixtures and equipment, the HVAC systems and equipment (including exterior HVAC systems and equipment exclusively serving the Premises), and all other electrical and mechanical systems serving the Premises), in good order, repair and condition at all times during the Lease Term, reasonable wear and tear and damage fire or other by casualty excepted. Tenant shall enter into a service contract for the repair and maintenance of the Premises HVAC systems and equipment, with a person or entity designated or approved in advance by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed, all at Tenant's sole cost and expense. In addition, Tenant shall, at Tenant's own expense, but under the supervision and subject to the prior approval of Landlord, such approval not to be unreasonably withheld, conditioned or delayed, and within any reasonable period of time specified by Landlord, promptly and adequately repair all damage to the Premises and replace or repair all damaged, broken, or worn fixtures and appurtenances, but only to the extent such repair or replacement is the obligation of Tenant hereunder and except for damage caused by reasonable wear and tear, fire or other casualty or beyond the reasonable control of Tenant; provided however, that Landlord may, at its option, upon receiving a request for approval from Tenant for any such repair or replacement, and upon five (5) days prior notice to Tenant, elect to make such repair or replacement and Tenant shall pay Landlord the reasonable cost thereof. If Tenant fails to make any such repair or replacement after the expiration or applicable notice and cure periods, Landlord may, but need not, make such repairs and replacements, and Tenant shall pay Landlord the cost thereof, including a percentage of the cost thereof (to be uniformly established for the Building and/or the Project) sufficient to reimburse Landlord for all overhead, general conditions, fees and other costs or expenses arising from Landlord's involvement with such repairs and replacements forthwith upon being billed for same. Notwithstanding the foregoing, Landlord shall be responsible (and the costs thereof shall be included in Operating Expenses) to keep and maintain the exterior areas of the Project, the parking areas, the Common Areas, the exterior walls, foundation and roof of the Building (including the roof membrane through a customary roof maintenance contract), and the structural portions of Building, and the base building systems and equipment of the Building, including the "Base Building", as defined in Section 8.2, below, in good working order, condition and repair, except to the extent that such repairs are required due to the negligence or willful misconduct of Tenant; provided, however, that if such repairs are due to the negligence or willful misconduct of Tenant, Landlord shall nevertheless make such repairs at Tenant's expense, or, if covered by Landlord's insurance, Tenant shall only be obligated to pay any deductible in connection therewith. Landlord may, but shall not be required to, subject to Article 27, enter the Premises to make such repairs and replacements.

7.2 **Landlord Replacement Items**. If, in the reasonable determination of Landlord, (i) any major component of the Building HVAC system, or any of major portion of the "base building" electrical system (any such item, a "**Landlord Replacement Item**") becomes worn or damaged to the extent that the particular item requires replacement (i.e., further repairs or maintenance are impractical), (ii) the replacement of such Landlord Replacement Item would be deemed a capital replacement under generally accepted real estate management and accounting principles, and (iii) such condition is not a result of Tenant's negligence or willful misconduct, or Tenant's failure to maintain such Landlord Replacement Item in good condition and repair in accordance with the terms of this Lease, then, notwithstanding the terms of Section 7.1, above, Landlord shall cause the replacement of such Landlord Replacement Item. The cost of such Landlord Replacement Item shall be borne by Landlord, provided that Landlord shall have the right to include cost in Operating Expenses on an amortized basis as provided in item (xiii) of Section 4.2.4, above.

7.3 **Waiver**. Tenant hereby waives any and all rights under and benefits of subsection 1 of Section 1932 and Sections 1941 and 1942 of the California Civil Code or under any similar law, statute, or ordinance now or hereafter in effect.

ARTICLE 8

ADDITIONS AND ALTERATIO NS

8.1 **Landlord's Consent to Alterations**. Tenant may not make any improvements, alterations, additions or changes to the Premises or any mechanical, plumbing or HVAC facilities or systems pertaining to the Premises (collectively, the "**Alterations**") without first procuring the prior written consent of Landlord to such Alterations, which consent shall be requested by Tenant not less than thirty (30) days prior to the commencement thereof, and which consent shall not be unreasonably withheld, conditioned or delayed by Landlord, provided it shall be deemed reasonable for Landlord to withhold its consent to any Alteration which adversely affects the structural portions or the systems or equipment of the Building or is visible from the exterior of the Building. Notwithstanding the foregoing, Tenant shall be permitted to make Alterations following ten (10) business days notice to Landlord, but without Landlord's prior consent, to the extent that such Alterations are decorative only *(i.e.*, installation of carpeting or painting of the Premises).

8.2 **Manner of Construction**. Landlord may impose, as a condition of its consent to any and all Alterations or repairs of the Premises or about the Premises that required the consent of Landlord, such requirements as Landlord in its reasonable discretion may deem desirable, including, but not limited to, the requirement that Tenant utilize for such purposes only contractors, subcontractors, materials, mechanics and materialmen approved in advance by Landlord (which approval shall not be unreasonably withheld, conditioned or delayed), or the requirement that Tenant shall, at Tenant's expense, remove such Alterations upon the expiration or any early termination of the Lease Term. Tenant shall construct such Alterations and perform such repairs in a good and workmanlike manner, in conformance with any and all applicable federal, state, county or municipal laws, rules and regulations and, if applicable, pursuant to a valid building permit, issued by the city in which the Building is located (or other applicable governmental authority), all in conformance with Landlord's reasonable construction rules and regulations; provided, however, that prior to commencing to construct any Alteration, Tenant shall meet with Landlord to discuss Landlord's design parameters and code compliance issues. In the event Tenant performs any Alterations in the Premises which require or give rise to governmentally required changes to the "**Base Building**," as that term is defined below, then Landlord shall, at Tenant's expense, make such changes to the Base Building. The "Base Building" shall include the structural portions of the Building, including the roof, foundation and exterior walls and windows), and the exit stairwells and the systems and equipment located in the internal core of the Building. In performing the work of any such Alterations, Tenant shall have the work performed in such manner so as not to materially obstruct access to the Project or any portion thereof, by any other tenant of the Project, and so as not to materially obstruct the business of Landlord or other tenants in the Project. Tenant shall not use (and upon notice from Landlord shall cease using) contractors, services, workmen, labor, materials or equipment that, in Landlord's reasonable judgment, would disturb labor harmony with the workforce or trades engaged in performing other work, labor or services in or about the Building or the Common Areas. Upon completion of any Alterations (or repairs), Tenant shall deliver to Landlord final lien waivers from all contractors, subcontractors and materialmen who performed such work. In addition to Tenant's obligations under Article 9 of this Lease, upon completion of any Alterations, Tenant shall deliver to the Project construction manager a reproducible copy of the "**as built**" drawings of the Alterations, if any, as well as copies of any permits, approvals and other documents issued by any governmental agency in connection with the Alterations.

8.3 **Payment for Improvements**. If payment is made by Tenant directly to contractors, Tenant shall (i) comply with Landlord's requirements for final lien releases and waivers in connection with Tenant's payment for work to contractors, and (ii) sign Landlord's standard contractor's rules and regulations. If Tenant orders any work directly from Landlord, Tenant shall pay to Landlord an amount equal to five percent (5%) of the cost of such work to compensate Landlord for all overhead, general conditions, fees and other costs and expenses arising from Landlord's involvement with such work. If Tenant does not order any work directly from Landlord, Tenant shall reimburse Landlord for Landlord's reasonable, actual, out-of-pocket costs and expenses actually incurred in connection with Landlord's review of such work. At Landlord's option, prior to the commencement of construction of any Alteration, Tenant shall provide Landlord with the reasonably anticipated cost thereof, which Landlord shall disburse during construction pursuant to Landlord's standard, commercially reasonable disbursement procedure.

8.4 **Construction Insurance.** In addition to the requirements of Article 10 of this Lease, in the event that Tenant makes any Alterations, prior to the commencement of such Alterations, Tenant shall provide Landlord with evidence that Tenant carries **"Builder's All Risk"** insurance in an amount approved by Landlord covering the construction of such Alterations, and such other insurance as Landlord may reasonably require, it being understood and agreed that all of such Alterations shall be insured by Tenant pursuant to Article 10 of this Lease immediately upon completion thereof. In addition, Tenant's contractors and subcontractors shall be required to carry Commercial General Liability Insurance and workers compensation insurance with a waiver of subrogation in favor of Landlord in an amount approved by Landlord and otherwise in accordance with the requirements of Article 10 of this Lease. Landlord may, in its discretion, require Tenant to obtain a lien and completion bond or some alternate form of security satisfactory to Landlord in an amount sufficient to ensure the lien-free completion of such Alterations and naming Landlord as a co-obligee.

8.5 **Landlord's Property.** All Alterations, improvements, fixtures, equipment and/or appurtenances which may be installed or placed in or about the Premises, from time to time, shall be at the sole cost of Tenant and shall be and remain the property of Tenant, but shall, upon the expiration or earlier termination of this Lease, become the property of Landlord. Furthermore, Landlord may, by written notice to Tenant delivered at the time Landlord's consent to any Alteration was requested, require Tenant, at Tenant's expense, to remove any such Alteration at the end of the Lease Term and to repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to a building standard tenant improved condition as determined by Landlord. If Tenant fails to complete such removal and/or to repair any damage caused by the removal of any Alterations and/or improvements and/or systems and equipment in the Premises and return the affected portion of the Premises to a building standard tenant improved condition as reasonably determined by Landlord, Landlord may do so and may charge the cost thereof to Tenant. Tenant hereby protects, defends, indemnifies and holds Landlord harmless from any liability, cost, obligation, expense or claim of lien in any manner relating to Tenant's installation, placement, removal or financing of any such Alterations, improvements, fixtures and/or equipment in, on or about the Premises. Notwithstanding the foregoing, Tenant shall not be required to remove any alterations, improvements, fixtures, equipment, trade fixtures and/or appurtenances existing on the Lease Commencement Date. Tenant may remove equipment brought to the Premises by Tenant and not paid for by Landlord.

ARTICLE 9

COVENANT AGAINST LIENS

Tenant shall keep the Project and Premises free from any liens or encumbrances arising out of the work performed, materials furnished or obligations incurred by or on behalf of Tenant, and shall protect, defend, indemnify and hold Landlord harmless from and against any claims, liabilities, judgments or costs (including, without limitation, reasonable attorneys' fees and costs) arising out of same or in connection therewith. Tenant shall give Landlord notice at least ten (10) days prior to the commencement of any such work on the Premises to afford Landlord the opportunity of posting and recording appropriate notices of non-responsibility (to the extent applicable pursuant to then applicable laws). Tenant shall remove or bond over any such lien or encumbrance by within ten (10) business days after notice by Landlord, and if Tenant shall fail to do so, Landlord may pay the amount necessary to remove such lien or encumbrance, without being responsible for investigating the validity thereof. The amount so paid shall be deemed Additional Rent under this Lease payable within ten (10) business days after demand, without limitation as to other remedies available to Landlord under this Lease. Nothing contained in this Lease shall authorize Tenant to do any act which shall subject Landlord's title to the Building or Premises to any liens or encumbrances whether claimed by operation of law or express or implied contract. Any claim to a lien or encumbrance upon the Building or Premises arising in connection with any such work or respecting the Premises not performed by or at the request of Landlord shall be null and void, or at Landlord's option, shall attach only against Tenant's interest in the Premises and shall in all respects be subordinate to Landlord's title to the Project, Building and Premises.

ARTICLE 10

INSURANCE

10.1 **Indemnification and Waiver.** Except to the extent caused by the gross negligence or willful misconduct of Landlord or Landlord Parties (as defined below), Tenant hereby assumes all risk of damage to property or injury to persons in, upon or about the Premises during the Lease Term or other period of Tenant's occupancy of the Premises from any cause whatsoever (including, but not limited to, any personal injuries resulting from a slip and fall in, upon or about the Premises) and agrees that Landlord, its partners, subpartners, parent company and affiliates, and their respective officers, agents, servants, employees, and independent contractors (collectively, **"Landlord Parties")** shall not be liable for, and are hereby released from any responsibility for, any damage either to person or property or resulting from the loss of use thereof, which damage is sustained by Tenant or by other persons claiming through Tenant. Tenant shall indemnify, defend, protect, and hold harmless the Landlord Parties from any and all loss, cost, damage, expense and liability (including without limitation court costs and reasonable attorneys' fees) incurred in connection with or arising from any cause in, on or about the Premises (including, but not limited to, a slip and fall), any acts, omissions or negligence of Tenant or of any person claiming by, through or under Tenant, or of the contractors, agents, servants, employees, invitees, guests or licensees of Tenant or any such person, in, on or about the Project or any breach of the terms of this Lease by Tenant, during the Lease Term or other period of Tenant's occupancy of the Premises, provided that the terms of the foregoing indemnity shall not apply to the negligence or willful misconduct of Landlord. Should Landlord be named as a defendant in any suit brought against Tenant in connection with or arising out of Tenant's occupancy of the Premises, and as to which Tenant's indemnification obligations as set forth above apply, Tenant shall pay to Landlord its costs and expenses incurred in such suit, including without limitation, its actual professional fees such as reasonable appraisers', accountants' and attorneys' fees. The provisions of this Section 10.1 shall survive the expiration or sooner termination of this Lease with respect to any claims or liability arising in connection with any event occurring prior to such expiration or termination.

10.2 **Landlord's Fire and Casualty Insurance.** Landlord shall insure the Building during the Lease Term against loss or damage due to fire and other casualties covered within the classification of fire and extended coverage, vandalism coverage and malicious mischief, sprinkler leakage, water damage and special extended coverage, in an amount equal to the full replacement value thereof. Such coverage shall be in such amounts, from such companies, and on such other terms and conditions, as Landlord may from time to time reasonably determine. Additionally, at the option of Landlord (but subject to the provisions of Section 4.2.4, above, which may exclude certain costs of insurance from Operating Expenses), such insurance coverage may include the risks of earthquakes and/or flood damage and additional hazards, a rental loss endorsement and one or more loss payee endorsements in favor of the holders of any mortgages or deeds of trust encumbering the interest of Landlord in the Building or the ground or underlying lessors of the Building, or any portion thereof. Tenant shall, at Tenant's expense, comply with all reasonable and customary insurance company requirements pertaining to the use of the Premises. If Tenant's conduct or use of the Premises causes any increase in the premium for such insurance policies then Tenant shall reimburse Landlord for any such increase.

10.3 **Tenant's Insurance.** Tenant shall maintain the following coverages in the following amounts.

10.3.1 Commercial General Liability Insurance on an occurrence form, and naming Landlord Parties as additional insureds, covering the insured against claims of bodily injury, personal injury and property damage (including loss of use thereof) arising out of Tenant's operations, and contractual liabilities (covering the performance by Tenant of its indemnity agreements) including coverage for the indemnity obligations set forth in Section 10 .1 of this Lease, and including products and completed operations coverage, for limits of liability on a per location basis of not less than:

Bodily Injury and	$5,000,000 each occurrence
Property Damage Liability	$5,000,000 annual aggregate

Personal Injury Liability	$1,000,000 each occurrence $1,000,000 annual aggregate

10.3.2 Physical Damage Insurance covering (i) all office furniture, business and trade fixtures, office equipment, free-standing cabinet work, movable partitions, merchandise and all other items of Tenant's property on the Premises installed by, for, or at the expense of Tenant, and (ii) any alterations and additions to the Premises made by or on behalf of Tenant after the Lease Commencement Date. Such insurance shall be written on an "**all risks**" of physical loss or damage basis, for the full replacement cost value (subject to reasonable deductible amounts) of the covered items and without any co-insurance clauses and shall include coverage for damage or other loss caused by fire or other peril including, but not limited to, earthquake, vandalism and malicious mischief, theft, water damage of any type, including sprinkler leakage, bursting or stoppage of pipes, and explosion. Landlord shall be named as a loss payee under such policy.

10.3.3 Business Income Interruption for one (1) year.

10.3.4 Worker's Compensation and Employer's Liability or other similar insurance pursuant to all applicable state and local statutes and regulations.

10.4 **Form of Policies**. The minimum limits of policies of insurance required of Tenant under this Lease shall in no event limit the liability of Tenant under this Lease. Such insurance shall (i) specifically cover the liability assumed by Tenant under this Lease, including, but not limited to, Tenant's obligations under Section 10.1 of this Lease; (ii) be issued by an insurance company having a rating of not less than A:X in Best's Insurance Guide or which is otherwise reasonably acceptable to Landlord and licensed to do business in the State of California; (iii) be primary insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and is non-contributing with any insurance requirement of Tenant; (v) be in form and content reasonably acceptable to Landlord; and (vi) provide that said insurance shall not be canceled or coverage materially changed unless thirty (30) days' prior written notice shall have been given to Landlord and any mortgagee of Landlord for which Tenant has been provided a notice address. Tenant shall deliver said policy or policies or certificates thereof to Landlord on or before the Lease Commencement Date and evidence of renewal at least ten (10) days before the expiration dates thereof. In the event Tenant shall fail to procure such insurance, Landlord may, at its option, procure such policies for the account of Tenant, and the cost thereof shall be paid to Landlord within ten (10) business days after delivery to Tenant of bills therefor. Tenant may meet the minimum levels of insurance set forth in Section 10.3, above, through the use of an "umbrella" policy.

10.5 **Subrogation.** Landlord and Tenant intend that their respective property loss risks shall be borne by reasonable insurance carriers to the extent above provided, and Landlord and Tenant hereby agree to look solely to, and seek recovery only from, their respective insurance carriers in the event of a property loss to the extent that such coverage is agreed to be provided hereunder. The parties each hereby waive all rights and claims against each other for such losses, and waive all rights of subrogation of their respective insurers, provided such waiver of subrogation shall not affect the right to the insured to recover thereunder. The parties agree that their respective insurance policies are now, or shall be, endorsed such that the waiver of subrogation shall not affect the right of the insured to recover thereunder, so long as no material additional premium is charged therefor.

ARTICLE 11

DAMAGE AND DESTRUCTION

11.1 **Repair of Damage to Premises by Landlord**. Tenant shall promptly notify Landlord of any damage to the Premises resulting from fire or any other casualty. If the Premises or any Common Areas serving or providing access to the Premises shall be damaged by fire or other casualty, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord's reasonable control, and subject to all other terms of this Article 1 1, restore the Base Building and such Common Areas. Such restoration shall be to substantially the same condition of the Base Building and the Common Areas prior to the casualty, except

for modifications required by zoning and building codes and other laws or by the holder of a mortgage on the Building or Project or any other modifications to the Common Areas deemed desirable by Landlord, which are consistent with the character of the Project, provided that access to the Premises and any common restrooms serving the Premises shall not be materially impaired. Landlord shall repair any injury or damage to the improvements which exist in the Premises as of the Lease Commencement Date (the "**Original Improvements**") and shall return such Original Improvements to their original condition. Prior to the commencement of construction, Tenant shall submit to Landlord, for Landlord's review and approval, all plans, specifications and working drawings relating thereto, and Landlord shall select the contractors to perform such improvement work. Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant's business resulting in any way from such damage or the repair thereof; provided however, that if such fire or other casualty shall have damaged the Premises or Common Areas necessary to Tenant's occupancy, and the Premises are not occupied by Tenant as a result thereof, then during the time and to the extent the Premises are unfit for occupancy, the Rent shall be abated in proportion to the ratio that the amount of rentable square feet of the Premises which is unfit for occupancy for the purposes permitted under this Lease bears to the total rentable square feet of the Premises, provided that if the Premises are so damaged that it is not reasonably practicable for Tenant to continue its business operations from any portion of the Premises, then the Rent shall be fully abated during such time.

11.2 **Landlord's Option to Repair**. Notwithstanding the terms of Section 11.1 of this Lease, Landlord may elect not to rebuild and/or restore the Premises, Building and/or Project, and instead terminate this Lease, by notifying Tenant in writing of such termination within sixty (60) days after the date of discovery of the damage, such notice to include a termination date giving Tenant sixty (60) days to vacate the Premises, but Landlord may so elect only if the Building or any Common Areas serving or providing access to the Building shall be damaged by fire or other casualty or cause, whether or not the Premises are affected, and one or more of the following conditions is present: (i) in Landlord's reasonable judgment, repairs cannot reasonably be completed within one hundred eighty (180) days after the date of discovery of the damage (when such repairs are made without the payment of overtime or other premiums); (ii) the holder of any mortgage on the Building or Project or ground lessor with respect to the Building or Project shall require that the insurance proceeds or any portion thereof be used to retire the mortgage debt, or shall terminate the ground lease, as the case may be; (iii) the damage is not fully covered by Landlord's insurance policies; or (iv) the damage occurs during the last twelve (12) months of the Lease Term; provided, however, that if Landlord does not elect to terminate this Lease pursuant to Landlord's termination right as provided above, and the repairs cannot, in the reasonable opinion of Landlord, be completed within one hundred eighty (180) days after being commenced, Tenant may elect, no earlier than sixty (60) days after the date of the damage and not later than ninety (90) days after the date of such damage, to terminate this Lease by written notice to Landlord effective as of the date specified in the notice, which date shall not be less than thirty (30) days nor more than sixty (60) days after the date such notice is given by Tenant. Landlord shall deliver written notice to Tenant no later than thirty (30) days after the date of the casualty, estimating the time required to repair such damage. Notwithstanding the provisions of this Section 11.2, Tenant shall have the right to terminate this Lease under this Section 11.2 only if each of the following conditions is satisfied: (a) the damage to the Project by fire or other casualty was not caused by the gross negligence or intentional act of Tenant or its partners or subpartners and their respective officers, agents, servants, employees, and independent contractors; and (b) as a result of the damage, Tenant cannot reasonably conduct business from the Premises.

11.3 **Waiver of Statutory Provisions**. The provisions of this Lease, including this Article 11, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, the Building or the Project, and any statute or regulation of the State of California, including, without limitation, Sections 1932(2) and 1933(4) of the California Civil Code, with respect to any rights or obligations concerning damage or destruction in the absence of an express agreement between the parties, and any other statute or regulation, now or hereafter in effect, shall have no application to this Lease or any damage or destruction to all or any part of the Premises, the Building or the Project.

ARTICLE 12

NONWAIVER

No provision of this Lease shall be deemed waived by either party hereto unless expressly waived in a writing signed thereby. The waiver by either party hereto of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of same or any other term, covenant or condition herein contained. The subsequent acceptance of Rent hereunder by Landlord shall not be deemed to be a waiver of any preceding breach by Tenant of any term, covenant or condition of this Lease, other than the failure of Tenant to pay the particular Rent so accepted, regardless of Landlord's knowledge of such preceding breach at the time of acceptance of such Rent. No acceptance of a lesser amount than the Rent herein stipulated shall be deemed a waiver of Landlord's right to receive the full amount due, nor shall any endorsement or statement on any check or payment or any letter accompanying such check or payment be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the full amount due. No receipt of monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right of possession hereunder, or after the giving of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit, or after final judgment for possession of the Premises, Landlord may receive and collect any Rent due, and the payment of said Rent shall not waive or affect said notice, suit or judgment.

ARTICLE 13

CONDEMNATION

If the whole or any material part of the Premises or Building shall be taken by power of eminent domain or condemned by any competent authority for any public or quasi-public use or purpose, or if any adjacent property or street shall be so taken or condemned, or reconfigured or vacated by such authority in such manner as to require the use, reconstruction or remodeling of any material part of the Premises, Building or Project, or if Landlord shall grant a deed or other instrument in lieu of such taking by eminent domain or condemnation, Landlord shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. If more than twenty-five percent (25%) of the rentable square feet of the Premises is taken, or if access to, or Tenant's operations at, the Premises is substantially impaired, in each case for a period in excess of one hundred eighty (180) days, Tenant shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. Tenant shall not because of such taking assert any claim against Landlord or the authority for any compensation because of such taking and Landlord shall be entitled to the entire award or payment in connection therewith, except that Tenant shall have the right to file any separate claim available to Tenant for any taking of Tenant's personal property and fixtures belonging to Tenant and removable by Tenant upon expiration of the Lease Term pursuant to the terms of this Lease, and for moving expenses, so long as such claims do not diminish the award available to Landlord, its ground lessor with respect to the Building or Project or its mortgagee, and such claim is payable separately to Tenant. All Rent shall be apportioned as of the date of such termination. If any part of the Premises shall be taken, and this Lease shall not be so terminated, the Rent shall be proportionately abated, and Tenant's Share appropriately adjusted. Tenant hereby waives any and all rights it might otherwise have pursuant to Section 126 5. 130 of The California Code of Civil Procedure. Notwithstanding anything to the contrary contained in this Article 13 , in the event of a temporary taking of all or any portion of the Premises for a period of one hundred and eighty (180) days or less, then this Lease shall not terminate but the Base Rent and the Additional Rent shall be abated for the period of such taking in proportion to the ratio that the amount of rentable square feet of the Premises taken bears to the total rentable square feet of the Premises. Landlord shall be entitled to receive the entire award made in connection with any such temporary taking.

ARTICLE 14

ASSIGNMENT AND SUBLETTING

14.1 **Transfers.** Except as otherwise expressly provided herein, Tenant shall not, without the prior written consent of Landlord, assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, permit any assignment, or other transfer of this Lease or any interest hereunder by operation of law, sublet the Premises or any part thereof, or enter into any license or concession agreements or otherwise permit the occupancy or use of the Premises or any part thereof by any persons other than Tenant and its employees and contractors (all of the foregoing are hereinafter sometimes referred to collectively as "**Transfers**" and any person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "**Transferee**"). If Tenant desires Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice (the "**Transfer Notice**") shall include (i) the proposed effective date of the Transfer, which shall not be less than thirty (30) days nor more than one hundred eighty (180) days after the date of delivery of the Transfer Notice, (ii) a description of the portion of the Premises to be transferred (the "**Subject Space**"), (iii) all of the material terms of the proposed Transfer and the consideration therefor, including calculation of the "**Transfer Premium**", if any, as that term is defined in Section 14.3 below, in connection with such Transfer, the name and address of the proposed Transferee, and a copy of all existing executed and/or proposed documentation pertaining to the proposed Transfer, including all existing operative documents to be executed to evidence such Transfer or the agreements incidental or related to such Transfer, (iv) current financial statements of the proposed Transferee certified by an officer, partner or owner thereof, business credit and personal references and history of the proposed Transferee and any other information reasonably required by Landlord which will enable Landlord to determine the financial responsibility, character, and reputation of the proposed Transferee, nature of such Transferee's business and proposed use of the Subject Space, and (v) an executed estoppel certificate from Tenant substantially in the form attached hereto as **Exhibit E**. Any Transfer made without Landlord's prior written consent shall, at Landlord's option, be null, void and of no effect with respect to this Lease and the Premises, and shall, at Landlord's option, constitute a default by Tenant under this Lease. Whether or not Landlord consents to any proposed Transfer, Tenant shall pay Landlord's reasonable review and processing fees, as well as any reasonable professional fees (including, without limitation, reasonable attorneys', accountants', architects', engineers' and consultants' fees) incurred by Landlord, within thirty (30) days after written request by Landlord; provided, however, that if the proposed Transfer does not involve a change of use or substantial alterations of the Premises, Landlord's recoverable fees shall not exceed $4,000.

14.2 **Landlord's Consent**. Landlord shall not unreasonably withhold, condition or delay its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in the Transfer Notice. Without limitation as to other reasonable grounds for withholding consent, the parties hereby agree that it shall be reasonable under this Lease and under any applicable law for Landlord to withhold consent to any proposed Transfer where one or more of the following apply:

14.2.1 The Transferee is of a character or reputation or engaged in a business which is not consistent with the quality of the Building or the Project;

14.2.2 The Transferee intends to use the Subject Space for purposes which are not permitted under this Lease;

14.2.3 The Transferee is either a governmental agency or instrumentality thereof;

14.2.4 The Transferee is not a party of reasonable financial worth and/or financial stability in light of the responsibilities to be undertaken in connection with the Transfer on the date consent is requested;

14.2.5 The proposed Transfer would cause a violation of another lease for space in the Project, or would give an occupant of the Project a right to cancel its lease; or

14.2.6 Either the proposed Transferee, or any person or entity which directly or indirectly, controls, is controlled by, or is under common control with, the proposed Transferee, (i) occupies space in the

Project at the time of the request for consent, or (ii) is negotiating with Landlord or has negotiated with Landlord during the six (6) month period immediately preceding the date Landlord receives the Transfer Notice, to lease space in the Project, but only if Landlord then has space available for lease in the Project that would meet the proposed Transferee's requirements.

If Landlord consents to any Transfer pursuant to the terms of this Section 14.2 (and does not exercise any recapture rights Landlord may have under Section 14.4 of this Lease), Tenant may within six (6) months after Landlord's consent, but not later than the expiration of said six-month period, enter into such Transfer of the Premises or portion thereof, upon substantially the same terms and conditions as are set forth in the Transfer Notice furnished by Tenant to Landlord pursuant to Section 14.1 of this Lease, provided that if there are any changes in the terms and conditions from those specified in the Transfer Notice (i) such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Section 14.2, or (ii) which would cause the proposed Transfer to be substantially more favorable to the Transferee than the terms set forth in Tenant's original Transfer Notice, Tenant shall again submit the Transfer to Landlord for its approval and other action under this Article 14 (including Landlord's right of recapture, if any, under Section 14.4 of this Lease). Terms shall be deemed substantially more favorable if the monetary obligations of the Transferee are five (5%) percent (or more) less than the terms quoted in Tenant's Transfer Notice. Notwithstanding anything to the contrary in this Lease, if Tenant or any proposed Transferee claims that Landlord has unreasonably withheld or delayed its consent under Section 14.2, their sole remedies shall be a suit for contract damages (other than damages for injury to, or interference with, Tenant's business including, without limitation, loss of profits, however occurring) or declaratory judgment and an injunction for the relief sought, and Tenant hereby waives all other remedies, including, without limitation, any right at law or equity to terminate this Lease, on its own behalf and, to the extent permitted under all applicable laws, on behalf of the proposed Transferee.

14.3 **Transfer Premium**. If Landlord consents to a Transfer (other than a Change of Control), as a condition thereto which the parties hereby agree is reasonable, Tenant shall pay to Landlord fifty percent (50%) of any "**Transfer Premium**," as that term is defined in this Section 14.3, received by Tenant from such Transferee. "**Transfer Premium**" shall mean all rent, additional rent or other consideration payable by such Transferee in connection with the Transfer in excess of the Rent and Additional Rent payable by Tenant under this Lease during the term of the Transfer on a per rentable square foot basis if less than all of the Premises is transferred, and after deduction of (i) any costs of improvements made to the Subject Space in connection with such Transfer, (ii) brokerage commissions paid in connection with such Transfer, and (iii) reasonable legal fees incurred in connection with such Transfer. "**Transfer Premium**" shall also include, but not be limited to, key money, bonus money or other cash consideration paid by Transferee to Tenant in connection with such Transfer, and any payment in excess of fair market value for services rendered by Tenant to Transferee or for assets, fixtures, inventory, equipment, or furniture transferred by Tenant to Transferee in connection with such Transfer. The determination of the amount of Landlord's applicable share of the Transfer Premium shall be made on a monthly basis as rent or other consideration is received by Tenant under the Transfer.

14.4 **Landlord's Option to Recapture Subject Space**. Notwithstanding anything to the contrary contained in this Article 14, in the event Tenant contemplates a Transfer (other than Change of Control) which, in the aggregate, would result in more than fifty percent (50%) of the Premises having been Transferred, Tenant shall give Landlord notice (the "**Intention to Transfer Notice**") of such contemplated Transfer (whether or not the contemplated Transferee or the terms of such contemplated Transfer have been determined). The Intention to Transfer Notice shall specify the portion of and amount of rentable square feet of the Premises which Tenant intends to Transfer (the "**Contemplated Transfer Space**"), the contemplated date of commencement of the Contemplated Transfer (the "**Contemplated Effective Date**"), and the contemplated length of the term of such contemplated Transfer, and shall specify that such Intention to Transfer Notice is delivered to Landlord pursuant to this Section 14.4 in order to allow Landlord to elect to recapture the Contemplated Transfer Space. Thereafter, Landlord shall have the option, by giving written notice to Tenant within thirty (30) days after receipt of any Intention to Transfer Notice, to recapture the Contemplated Transfer Space. Such recapture shall cancel and terminate this Lease with respect to such Contemplated Transfer Space as of the Contemplated Effective Date. In the event of a recapture by Landlord, if this Lease shall be canceled with respect to less than the entire Premises, the Rent reserved herein shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises, and this Lease as so amended shall continue thereafter in

full force and effect, and upon request of either party, the parties shall execute written confirmation of the same. If Landlord declines, or fails to elect in a timely manner, to recapture such Contemplated Transfer Space under this Section 14.4, then, subject to the other terms of this Article 14, for a period of nine (9) months (the **"Nine Month Period")** commencing on the last day of such thirty (30) day period, Landlord shall not have any right to recapture the Contemplated Transfer Space with respect to any Transfer made during the Nine Month Period, provided that any such Transfer is substantially on the terms set forth in the Intention to Transfer Notice, and provided further that any such Transfer shall be subject to the remaining terms of this Article 14. If such a Transfer is not so consummated within the Nine Month Period (or if a Transfer is so consummated, then upon the expiration of the term of any Transfer of such Contemplated Transfer Space consummated within such Nine Month Period), Tenant shall again be required to submit a new Intention to Transfer Notice to Landlord with respect any contemplated Transfer, as provided above in this Section 14.4.

14.5 **Effect of Transfer.** If Landlord consents to a Transfer, (i) the terms and conditions of this Lease shall in no way be deemed to have been waived or modified, (ii) such consent shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) Tenant shall deliver to Landlord, promptly after execution, an original executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, (iv) Tenant shall furnish upon Landlord's request a complete statement, certified by an independent certified public accountant, or Tenant's chief financial officer, setting forth in detail the computation of any Transfer Premium Tenant has derived and shall derive from such Transfer, and (v) no Transfer relating to this Lease or agreement entered into with respect thereto, whether with or without Landlord's consent, shall relieve Tenant or any guarantor of the Lease from any liability under this Lease, including, without limitation, in connection with the Subject Space. Landlord or its authorized representatives shall have the right at all reasonable times and upon five (5) days' prior written notice to audit the books, records and papers of Tenant relating to any Transfer (other than a Change of Control), and shall have the right to make copies thereof; provided that Tenant may require Landlord and its authorized representatives execute a commercially reasonable confidentiality agreement regarding such audit. If the Transfer Premium respecting any such Transfer shall be found understated, Tenant shall, within thirty (30) days after demand, pay the deficiency, and if understated by more than five percent (5%), Tenant shall pay Landlord's costs of such audit.

14.6 **Additional Transfers.** For purposes of this Lease, the term **"Transfer"** shall also include (each, a **"Change of Control")** (i) if Tenant is a partnership, the withdrawal or change, voluntary, involuntary or by operation of law, of fifty percent (50%) or more of the partners, or transfer of fifty percent (50%) or more of partnership interests, within a twelve (12)-month period, or the dissolution of the partnership without immediate reconstitution thereof, and (ii) if Tenant is a closely held corporation (*i.e.*, whose stock is not publicly held and not traded through an exchange or over the counter), (A) the dissolution, merger, consolidation or other reorganization of Tenant or (B) the sale or other transfer of an aggregate of fifty percent (50%) or more of the voting shares of Tenant (other than to immediate family members by reason of gift or death), within a twelve (12)-month period, or (C) the sale, mortgage, hypothecation or pledge (other than as related to financing obtained in the ordinary course of Tenant's business) of an aggregate of fifty percent (50%) or more of the value of the unencumbered assets of Tenant within a twelve (12)-month period.

14.7 **Occurrence of Default.** Any Transfer hereunder shall be subordinate and subject to the provisions of this Lease, and if this Lease shall be terminated during the term of any Transfer (other than a Change of Control), Landlord shall have the right to: (i) treat such Transfer as cancelled and repossess the Subject Space by any lawful means, or (ii) require that such Transferee attorn to and recognize Landlord as its landlord under any such Transfer. If Tenant shall be in default under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), Landlord is hereby irrevocably authorized, as Tenant's agent and attorney-in-fact, to direct any Transferee to make all payments under or in connection with the Transfer directly to Landlord (which Landlord shall apply towards Tenant's obligations under this Lease) until such default is cured. Such Transferee shall rely on any representation by Landlord that Tenant is in default hereunder, without any need for confirmation thereof by Tenant. Upon any assignment, the assignee shall assume in writing all obligations and covenants of Tenant thereafter to be performed or observed under this Lease. No collection or acceptance of rent by Landlord from any Transferee shall be deemed a waiver of any provision of this Article 14 or the approval of any Transferee or a release of Tenant from any obligation under this Lease, whether theretofore or thereafter accruing. In no event shall Landlord's enforcement of any provision of this Lease against any Transferee be deemed a waiver

of Landlord's right to enforce any term of this Lease against Tenant or any other person. If Tenant's obligations hereunder have been guaranteed, Landlord's consent to any Transfer shall not be effective unless the guarantor also consents to such Transfer.

14.8 **Non-Transfers**. Notwithstanding anything to the contrary contained in this Article 14, an assignment or subletting of all or a portion of the Premises to an affiliate of Tenant (an entity which is controlled by, controls, or is under common control with, Tenant) (an "**Affiliate Assignee**"), shall not be deemed a Transfer under this Article 14, provided that Tenant notifies Landlord of any such assignment or sublease and promptly supplies Landlord with any documents or information reasonably requested by Landlord regarding such assignment or sublease or such affiliate, and further provided that such assignment or sublease is not a subterfuge by Tenant to avoid its obligations under this Lease. "**Control**," as used in this Section 14.8, shall mean (i) the ownership, directly or indirectly, of at least fifty-one percent (51%) of the voting securities of, or possession of the right to vote, in the ordinary direction of its affairs, of at least fifty-one percent (5 1 %) of the voting interest in, any person or entity, or (ii) possessing the power to control or manage the entity's affairs, directly or by electing or appointing directors, officers, or managers. No such affiliated transaction shall release Tenant from its obligations under the Lease.

14.9 **Merger, Acquisition**. Notwithstanding any other provision of this Lease, Tenant shall have the right, subject to Landlord's consent, to assign this Lease or sublet all or a portion of the Premises to a person or entity which results (whether through operation of law or otherwise) from a merger or consolidation with Tenant, or to any person or entity which acquires all the assets of Tenant as a going concern in the business that is being conducted on the Premises, or any person or entity that purchases all of the stock or ownership interests of Tenant (a "**Permitted Transfer**"), provided such entity (a "**Permitted Transferee**"), in the case of an assignment, assumes all the obligations of Tenant under the Lease. Landlord shall not deny consent if each of the following conditions are met: (a) the Transferee has a net worth at least equal to that of Tenant immediately prior to such merger or consolidation, and (b) is of a character and quality similar to that of other tenants in the Building or in other buildings of similar age, size, use and quality in the area. No such Permitted Transfer shall release Tenant from its obligations under the Lease.

ARTICLE 15

SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES

15.1 **Surrender of Premises**. No act or thing done by Landlord or any agent or employee of Landlord during the Lease Term shall be deemed to constitute an acceptance by Landlord of a surrender of the Premises unless such intent is specifically acknowledged in writing by Landlord. The delivery of keys to the Premises to Landlord or any agent or employee of Landlord shall not constitute a surrender of the Premises or effect a termination of this Lease, whether or not the keys are thereafter retained by Landlord, and notwithstanding such delivery Tenant shall be entitled to the return of such keys at any reasonable time upon request until this Lease shall have been properly terminated. The voluntary or other surrender of this Lease by Tenant, whether accepted by Landlord or not, or a mutual termination hereof, shall not work a merger, and at the option of Landlord shall operate as an assignment to Landlord of all subleases or subtenancies affecting the Premises or terminate any or all such sublessees or subtenancies.

15.2 **Removal of Tenant Property by Tenant**. Upon the expiration of the Lease Term, or upon any earlier termination of this Lease, Tenant shall, subject to the provisions of this Article 15, quit and surrender possession of the Premises to Landlord in as good order and condition as when Tenant took possession and as thereafter improved by Landlord and/or Tenant, reasonable wear and tear, damage by fire or other casualty, and repairs which are specifically made the responsibility of Landlord hereunder excepted, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by Tenant or any Tenant Party (collectively, "**Tenant HazMat Operations**") and released of any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"). Upon such expiration or termination, Tenant shall, at Landlord's sole option and without

expense to Landlord, remove or cause to be removed from the Premises those Alterations as to which Landlord conditioned its approval upon removal at the expiration or earlier termination of the Lease, all debris and rubbish, and such items of furniture, equipment, business and trade fixtures, free-standing cabinet work, movable partitions and other articles of personal property owned by Tenant or installed or placed by Tenant at its expense in the Premises, and such similar articles of any other persons claiming under Tenant, as Landlord may, in its sole discretion, require to be removed, and Tenant shall repair at its own expense all damage to the Premises and Building resulting from such removal. Any items installed by Landlord or using any allowance from Landlord shall remain in the Premises unless required to be removed by Landlord in Landlord's sole discretion. Notwithstanding the foregoing, Tenant shall have no obligation to (and shall not except with Landlord's prior written consent) remove or restore the following at the expiration or earlier termination of the Lease Term: (i) any fixtures, improvements or alterations to the Premises existing as of the Lease Commencement Date, (ii) any items installed by Landlord at its expense or using any allowance from Landlord during the Lease Term, and (iii) all of Landlord's fixtures, equipment furnishing, furniture and other personal property located in the Premises (the "**Existing Personal Property**"), which Existing Personal Property is listed on **Exhibit I** attached hereto. During the Lease Term, Tenant shall have the right to use the Existing Personal Property at no additional rent, provided Tenant shall maintain and surrender such items in substantially the same condition as received on the Lease Commencement Date, reasonable wear and tear and damage by fire or other casualty excepted. Notwithstanding anything herein to the contrary, Landlord agrees that all items listed on **Exhibit J** attached hereto are the property of Tenant and, along with all other furniture, equipment, business and trade fixtures, free-standing cabinet work, movable partitions and other articles of personal property owned by Tenant (the "**Tenant Personal Property**"), may be removed by Tenant from the Premises at any time, including upon the expiration or earlier termination of the Lease Term, provided that Tenant repairs at its own expense all damage to the Premises and Building resulting from such removal.

15.3 **Environmental Assessment**. In connection with its surrender of the Premises, Tenant shall submit to Landlord, at least thirty (30) days prior to the expiration date of this Lease (or in the event of an earlier termination of this Lease, as soon as reasonably possible following such termination), an Environmental Assessment of the Premises by a competent and experienced environmental engineer or engineering firm reasonably satisfactory to Landlord (pursuant to a contract approved by Landlord and providing that Landlord can rely on the Environmental Assessment), which (i) evidences that the Premises are in a clean and safe condition and free and clear of any Hazardous Materials to the extent required by the terms of **Section 15.2**, above; and (ii) includes a review of the Premises by an environmental consultant for asbestos, mold, fungus, spores, and other moisture conditions, on-site chemical use, and lead-based paint. If such Environmental Assessment reveals that remediation or Clean-up is required under any Environmental Laws as to which Tenant has a removal, remediation or restoration obligation under **Section 5.4** or **Section 15.2**, Tenant shall submit a remediation plan prepared by a recognized environmental consultant and shall be responsible for all costs of remediation and Clean-up, as more particularly provided in **Section 5.4**, above.

15.4 **Surrender Plan**. At least nine (9) months prior to the expiration date of this Lease (or in the event of an earlier termination of this Lease, as soon as reasonably possible following such termination), Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term in accordance with Section 15.2 (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and reasonable approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall reasonably request. Prior to the expiration date (or in the event of an earlier termination of this Lease, as soon as reasonably possible following such termination), Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed (which evidence may be the Environmental Assessment provided pursuant to Section 15.3) and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the approved Surrender Plan shall have been satisfactorily completed. If such inspection by Landlord's environmental consultant reveals that Tenant failed to

satisfactorily complete the approved Surrender Plan in any material respect, Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $5,000. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

ARTICLE 16

HOLDING OVER

If Tenant holds over after the expiration of the Lease Term or earlier termination thereof, with the express or implied consent of Landlord, such tenancy shall be from month-to-month only, and shall not constitute a renewal hereof or an extension for any further term. If Tenant holds over after the expiration of the Lease Term of earlier termination thereof, without the express or implied consent of Landlord, such tenancy shall be deemed to be a tenancy by sufferance only, and shall not constitute a renewal hereof or an extension for any further term. In either case, Rent shall be payable at a monthly rate equal to the product of (i) the Rent applicable during the last rental period of the Lease Term under this Lease, and (ii) a percentage equal to 150% during the first two (2) months immediately following the expiration or earlier termination of the Lease Term, and 200% thereafter. Such month-to-month tenancy or tenancy by sufferance, as the case may be, shall be subject to every other applicable term, covenant and agreement contained herein. Nothing contained in this Article 16 shall be construed as consent by Landlord to any holding over by Tenant, and Landlord expressly reserves the right to require Tenant to surrender possession of the Premises to Landlord as provided in this Lease upon the expiration or other termination of this Lease. The provisions of this Article 16 shall not be deemed to limit or constitute a waiver of any other rights or remedies of Landlord provided herein or at law. If Tenant fails to surrender the Premises within thirty (30) days after the termination or expiration of this Lease, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall protect, defend, indemnify and hold Landlord harmless from all loss, costs (including reasonable attorneys' fees) and liability resulting from such failure, including, without limiting the generality of the foregoing, any claims made by any succeeding tenant founded upon such failure to surrender and any lost profits to Landlord resulting therefrom.

ARTICLE 17

ESTOPPEL CERTIFICATES

17.1 Estoppel Certificates. Within ten (10) business days following a request in writing by Landlord, Tenant shall execute, acknowledge and deliver to Landlord an estoppel certificate, which, as submitted by Landlord, shall be substantially in the form of **Exhibit E**, attached hereto (or such other commercially reasonable form as may be required by any prospective mortgagee or purchaser of the Project, or any portion thereof), indicating therein any exceptions thereto that may exist at that time, and shall also contain any other information reasonably requested by Landlord or Landlord's mortgagee or prospective mortgagee. Any such certificate may be relied upon by any prospective mortgagee or purchaser of all or any portion of the Project. Tenant shall execute and deliver whatever other instruments may be reasonably required for such purposes. Failure of Tenant to timely execute, acknowledge and deliver such estoppel certificate or other instruments shall constitute an acceptance of the Premises and an acknowledgment by Tenant that statements included in the estoppel certificate are true and correct, without exception. Within fifteen (15) business days following a request in writing by Tenant, Landlord shall execute, acknowledge and deliver to Tenant an estoppel certificate, in a commercially reasonable form, contain such information as shall be reasonably requested by Tenant. Any such certificate may be relied upon by Tenant, any permitted assignee or subtenant of Tenant, or any purchaser of or lender to Tenant.

17.2 Financial Statements. At any time during the Lease Term, Landlord may require Tenant to provide Landlord with a current financial statement and financial statements of the two (2) years prior to the current financial statement year. Such statements shall be prepared in accordance with generally accepted accounting principles and, if such is the normal practice of Tenant, shall be audited by an independent certified public accountant. Tenant's delivery of any such financials may, at Tenant's option, be conditioned on Tenant's receipt of a commercially reasonable confidentiality agreement with respect to the same.

ARTICLE 18

SUBORDINATION

This Lease shall be subject and subordinate to all present and future ground or underlying leases of the Building or Project and to the lien of any mortgage, trust deed or other financial encumbrances now or hereafter in force against the Building or Project or any part thereof, if any, and to all renewals, extensions, modifications, consolidations and replacements thereof, and to all advances made or hereafter to be made upon the security of such mortgages or trust deeds, unless the holders of such mortgages, trust deeds or other financial encumbrances, or the lessors under such ground lease or underlying leases, require in writing that this Lease be superior thereto; provided that, with respect to any mortgage, deed of trust or other financial encumbrance hereafter granted, the subordination of the Lease to any such mortgage or deed of trust shall be conditioned on Landlord providing to Tenant a written, recordable subordination, non-disturbance and attornment agreement from such mortgagee in a commercially reasonable form. Tenant covenants and agrees in the event any proceedings are brought for the foreclosure of any such mortgage or deed in lieu thereof (or if any ground lease is terminated), to attorn, without any deductions or set-offs whatsoever, to the lienholder or purchaser or any successors thereto upon any such foreclosure sale or deed in lieu thereof (or to the ground lessor), if so requested to do so by such purchaser or lienholder or ground lessor, and to recognize such purchaser or lienholder or ground lessor as the lessor under this Lease, provided such lienholder or purchaser or ground lessor shall agree to accept this Lease and not disturb Tenant's occupancy, so long as Tenant timely pays the rent and observes and performs the terms, covenants and conditions of this Lease to be observed and performed by Tenant. Landlord's interest herein may be assigned as security at any time to any lienholder. Tenant shall, within ten (10) days of request by Landlord, execute such further instruments or assurances as Landlord may reasonably deem necessary to evidence or confirm the subordination or superiority of this Lease to any such mortgages, trust deeds, ground leases or underlying leases. Tenant waives the provisions of any current or future statute, rule or law which may give or purport to give Tenant any right or election to terminate or otherwise adversely affect this Lease and the obligations of the Tenant hereunder in the event of any foreclosure proceeding or sale. Landlord hereby represents and warrants to Tenant that there is no mortgage or trust deed now in force against the Building or Project or any part thereof.

ARTICLE 19

DEFAULTS; REMEDIES

19.1 **Events of Default**. The occurrence of any of the following shall constitute a default of this Lease by Tenant:

19.1.1 Any failure by Tenant to pay any Rent or any other charge required to be paid under this Lease, or any part thereof, within five (5) business days after notice that the same is overdue; or

19.1.2 Any failure by Tenant to observe or perform any other provision, covenant or condition of this Lease to be observed or performed by Tenant where such failure continues for thirty (30) days after written notice thereof from Landlord to Tenant; provided that if the nature of such default is such that the same cannot reasonably be cured within a thirty (30) day period, Tenant shall not be deemed to be in Default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such default; or

19.1.3 The failure by Tenant to observe or perform according to the provisions of Articles 5, 1.14, 17 or 18 of this Lease where such failure continues for more than five (5) business days after notice from Landlord; provided that if the nature of such default is such that the same cannot reasonably be cured within a ten (10) day period, Tenant shall not be deemed to be in default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such default.

The notice periods provided herein are in lieu of, and not in addition to, any notice periods provided by law.

19.2 **Remedies Upon Default.** Upon the occurrence of any default by tenant (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), Landlord shall have, in addition to any other remedies available to Landlord at law or in equity (all of which remedies shall be distinct, separate and cumulative), the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

19.2.1 Terminate this Lease, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, all in compliance with applicable laws, without being liable for prosecution or any claim or damages therefor; and Landlord may recover from Tenant the following:

(i) The worth at the time of award of the unpaid rent which has been earned at the time of such termination; plus

(ii) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iii) The worth at the time of award of the amount by which the unpaid rent for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iv) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(v) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term **"rent"** as used in this Section 19.2 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 19.2.l(i) and (ii) above, the "worth at the time of award" shall be computed by allowing interest at the rate set forth in Article 25 of this Lease, but in no case greater than the maximum amount of such interest permitted by law. As used in Section 19.2.l(iii) above, the **"worth at the time of award"** shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%).

19.2.2 Landlord shall have the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease on account of any default by Tenant (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies under this Lease, including the right to recover all rent as it becomes due.

19.2.3 Landlord shall at all times have the rights and remedies (which shall be cumulative with each other and cumulative and in addition to those rights and remedies available under Sections 19.2.1 and 19.2.2, above, or any law or other provision of this Lease), without prior demand or notice except as required by applicable law, to seek any declaratory, injunctive or other equitable relief, and specifically enforce this Lease, or restrain or enjoin a violation or breach of any provision hereof.

19.3 **Subleases of Tenant**. If Landlord elects to terminate this Lease on account of any default by tenant (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), as set forth in this Article 19, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. In the event of Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

19.4 **Efforts to Relet**. No re-entry or repossession, repairs, maintenance, changes, alterations and additions, reletting, appointment of a receiver to protect Landlord's interests hereunder, or any other action or omission by Landlord shall be construed as an election by Landlord to terminate this Lease or Tenant's right to possession, or to accept a surrender of the Premises, nor shall same operate to release Tenant in whole or in part from any of Tenant's obligations hereunder, unless express written notice of such intention is sent by Landlord to Tenant. Tenant hereby irrevocably waives any right otherwise available under any law to redeem or reinstate this Lease.

ARTICLE 20

COVENANT OF QUIET ENJOYMENT

Landlord covenants that Tenant, on paying the Rent, charges for services and other payments herein reserved and on keeping, observing and performing all the other terms, covenants, conditions, provisions and agreements herein contained on the part of Tenant to be kept, observed and performed (all within applicable notice and cure periods), shall, during the Lease Term, peaceably and quietly have, hold and enjoy the Premises subject to the terms, covenants, conditions, provisions and agreements hereof without interference by Landlord or any persons lawfully claiming by or through Landlord. The foregoing covenant is in lieu of any other covenant express or implied.

ARTICLE21

SECURITY DEPOSIT; LETTER OF CREDIT

21.1 **Security Deposit**. Concurrently with Tenant's execution of this Lease, Tenant shall deposit with Landlord a security deposit (the "**Security Deposit**") in the amount set forth in Section 8 of the Summary, as security for the faithful performance by Tenant of all of its obligations under this Lease. If Tenant Defaults with respect to any provisions of this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), including, but not limited to, the provisions relating to the payment of Rent, the removal of property and the repair of resultant damage, Landlord may, without notice to Tenant, but shall not be required to apply all or any part of the Security Deposit for the payment of any Rent or any other sum in Default and Tenant shall, within ten (10) business days after demand therefor, restore the Security Deposit to its original amount. Any unapplied portion of the Security Deposit shall be returned to Tenant within forty-five (45) days following the expiration of the Lease Term. Tenant shall not be entitled to any interest on the Security Deposit. Tenant hereby irrevocably waives and relinquishes any and all rights, benefits, or protections, if any, Tenant now has, or in the future may have, under Section 1950.7 of the California Civil Code, any successor statute, and all other similar provisions of law, now or hereafter in effect, including, but not limited to, any provision of law which (i) establishes the time frame by which a landlord must refund a security deposit under a lease, and/or (ii) provides that a landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by a tenant or to clean the subject premises. Tenant acknowledges and agrees that (a) any statutory time frames for the return of a security deposit are superseded by the express period identified in this Article 21 , above, and (b) rather than be so limited, Landlord may claim from the Security Deposit (1) any and all sums expressly identified in this Article 21 , above, and (2) any additional sums reasonably necessary to compensate Landlord for any and all losses or damages caused by Tenant's Default of this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), including, but not limited to, all damages or rent due upon termination of Lease pursuant to Section 1951.2 of the California Civil Code.

21.2 **Delivery of Letter of Credit**. In lieu of the Security Deposit, Tenant may deliver to Landlord, concurrently with Tenant's execution of this Lease, an unconditional, clean, irrevocable letter of credit (the "**L-C**") in the amount set forth in Section 21.3 below (the "**L-C Amount**"), which L-C shall be issued by a money-center, solvent and nationally recognized bank (a bank which accepts deposits, maintains accounts, has a local California office which will negotiate a letter of credit, and whose deposits are insured by the FDIC) reasonably acceptable to Landlord (such approved, issuing bank being referred to herein as the "**Bank**"), which Bank must have a short term Fitch Rating which is not less than "Fl", and a long term Fitch Rating which is not less than "A"(or in the event such Fitch Ratings are no longer available, a comparable rating from Standard and Poor's Professional Rating Service or Moody's Professional Rating Service) (collectively, the "**Bank's Credit Rating Threshold**"), and which L-C shall be in the form of **Exhibit H**, attached hereto. Tenant shall pay all expenses, points and/or fees incurred by Tenant in obtaining the L-C. The L-C shall (i) be "callable" at sight, irrevocable and unconditional, (ii) be maintained in effect, whether through renewal or extension, for the period commencing on the date of this Lease and continuing until the date (the "**L-C Expiration Date**") that is no less than one hundred twenty (120) days after the expiration of the Lease Term, and Tenant shall deliver a new L-C or certificate of renewal or extension to Landlord at least sixty (60) days prior to the expiration of the L-C then held by Landlord, without any action whatsoever on the part of Landlord, (iii) be fully assignable by Landlord, its successors and assigns, (iv) permit partial draws and multiple presentations and drawings, and (v) be otherwise subject to the Uniform Customs and Practices for Documentary Credits (1993-Rev), International Chamber of Commerce Publication #600, or the International Standby Practices ISP 98, International Chamber of Commerce Publication #590. Landlord, or its then managing agent, shall have the right to draw down an amount up to the face amount of the L-C if any of the following shall have occurred or be applicable: (A) such amount is due to Landlord under the terms and conditions of this Lease, or (8) Tenant has filed a voluntary petition under the U.S. Bankruptcy Code or any state bankruptcy code (collectively, "**Bankruptcy Code**"), or (C) an involuntary petition has been filed against Tenant under the Bankruptcy Code, or (D) the Bank has notified Landlord that the L-C will not be renewed or extended through the L-C Expiration Date, or (E) Tenant is placed into receivership or conservatorship, or becomes subject to similar proceedings under Federal or State law, or (F) Tenant executes an assignment for the benefit of creditors, or (G) if (1) any of the Bank's Fitch Ratings (or other comparable ratings to the extent the Fitch Ratings are no longer available) have been reduced below the Bank's Credit Rating Threshold, or (2) there is otherwise a material adverse change in the financial condition of the Bank, and Tenant has failed to provide Landlord with a replacement letter of credit, conforming in all respects to the requirements of this Article 21 (including, but not limited to, the requirements placed on the iss uing Bank more particularly set forth in this Section 21.1 above), in the amount of the applicable L-C Amount, within ten (10) days following Landlord's written demand therefor (with no other notice or cure or grace period being applicable thereto, notwithstanding anything in this Lease to the contrary) (each of the foregoing being an "**L-C Draw Event**"). The L-C shall be honored by the Bank regardless of whether Tenant disputes Landlord's right to draw upon the L-C. In addition, in the event the Bank is placed into receivership or conservatorship by the Federal Deposit Insurance Corporation or any successor or similar entity, then, effective as of the date such receivership or conservatorship occurs, said L-C shall be deemed to fail to meet the requirements of this Article 21, and, within ten (10) days following Landlord's notice to Tenant of such receivership or conservatorship (the "**L-C FDIC Replacement Notice**"), Tenant shall replace such L-C with a substitute letter of credit from a different issuer (which issuer shall meet or exceed the Bank's Credit Rating Threshold and shall otherwise be acceptable to Landlord in its reasonable discretion) and that complies in all respects with the requirements of this Article 21. If Tenant fails to replace such L-C with such conforming, substitute letter of credit pursuant to the terms and conditions of this Section 21.1, then, notwithstanding anything in this Lease to the contrary, Landlord shall have the right to declare Tenant in default of this Lease for which there shall be no notice or grace or cure periods being applicable thereto (other than the aforesaid ten (10) day period). Tenant shall be responsible for the payment of any and all costs incurred with the review of any replacement L-C (including without limitation Landlord's reasonable attorneys' fees), which replacement is required pursuant to this Section or is otherwise requested by Tenant.

21.3 **Application of L-C**. Tenant hereby acknowledges and agrees that Landlord is entering into this Lease in material reliance upon the ability of Landlord to draw upon the L-C upon the occurrence of any L-C Draw Event. In the event of any L-C Draw Event, Landlord may, but without obligation to do so, and without notice to Tenant, draw upon the L-C, in part or in whole, to cure any such L-C Draw Event and/or to compensate Landlord for any and all damages of any kind or nature sustained or which Landlord reasonably estimates that it will sustain resulting from Tenant's breach or default of the Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease) or other L-C Draw Event and/or to compensate Landlord for any and all

damages arising out of, or incurred in connection with, the termination of this Lease, including, without limitation, those specifically identified in Section 1951.2 of the California Civil Code. The use, application or retention of the L-C, or any portion thereof, by Landlord shall not prevent Landlord from exercising any other right or remedy provided by this Lease or by any applicable law, it being intended that Landlord shall not first be required to proceed against the L-C, and such L-C shall not operate as a limitation on any recovery to which Landlord may otherwise be entitled. Tenant agrees not to interfere in any way with payment to Landlord of the proceeds of the L-C, either prior to or following a "draw" by Landlord of any portion of the L-C, regardless of whether any dispute exists between Tenant and Landlord as to Landlord's right to draw upon the L-C. No condition or term of this Lease shall be deemed to render the L-C conditional to justify the issuer of the L-C in failing to honor a drawing upon such L-C in a timely manner. Tenant agrees and acknowledges that (i) the L-C constitutes a separate and independent contract between Landlord and the Bank, (ii) Tenant is not a third party beneficiary of such contract, (iii) Tenant has no property interest whatsoever in the L-C or the proceeds thereof, and (iv) in the event Tenant becomes a debtor under any chapter of the Bankruptcy Code, Tenant is placed into receivership or conservatorship, and/or there is an event of a receivership, conservatorship or a bankruptcy filing by, or on behalf of, Tenant, neither Tenant, any trustee, nor Tenant's bankruptcy estate shall have any right to restrict or limit Landlord's claim and/or rights to the L-C and/or the proceeds thereof by application of Section 502(b)(6) of the U.S . Bankruptcy Code or otherwise.

21.4 **In General**. If, as a result of any drawing by Landlord of all or any portion of the L-C, the amount of the L-C shall be less than the L-C Amount, Tenant shall, within five (5) days thereafter, provide Landlord with additional letter(s) of credit in an amount equal to the deficiency, and any such additional letter(s) of credit shall comply with all of the provisions of this Article 21. Tenant further covenants and warrants that it will neither assign nor encumber the L-C or any part thereof and that neither Landlord nor its successors or assigns will be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance. Without limiting the generality of the foregoing, if the L-C expires earlier than the L-C Expiration Date, Landlord will accept a renewal thereof (such renewal letter of credit to be in effect and delivered to Landlord, as applicable, not later than sixty (60) days prior to the expiration of the L-C), which shall be irrevocable and automatically renewable as above provided through the L-C Expiration Date upon the same terms as the expiring L-C or such other terms as may be acceptable to Landlord in its sole discretion. However, if the L-C is not timely renewed, or if Tenant fails to maintain the L-C in the amount and in accordance with the terms set forth in this Article 21, Landlord shall have the right to either (x) present the L-C to the Bank in accordance with the terms of this Article 21, and the proceeds of the L-C may be applied by Landlord against any Rent payable by Tenant under this Lease that is not paid when due and/or to pay for all losses and damages that Landlord has suffered or that Landlord reasonably estimates that it will suffer as a result of any breach or default by Tenant under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), or (y) pursue its remedy under Section 21.3.3 below. In the event Landlord elects to exercise its rights under the foregoing item (x), (I) any unused proceeds shall constitute the property of Landlord (and not Tenant's property or, in the event of a receivership, conservatorship, or a bankruptcy filing by Tenant, property of such receivership, conservatorship or Tenant's bankruptcy estate) and need not be segregated from Landlord's other assets, and (II) Landlord agrees to pay to Tenant within thirty (30) days after the L-C Expiration Date the amount of any proceeds of the L-C received by Landlord and not applied against any Rent payable by Tenant under this Lease that was not paid when due or used to pay for any losses and/or damages suffered by Landlord (or reasonably estimated by Landlord that it will suffer) as a result of any breach or default by Tenant under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease); provided, however, that if prior to the L-C Expiration Date a voluntary petition is filed by Tenant, or an involuntary petition is filed against Tenant by any of Tenant's creditors, under the Bankruptcy Code, then Landlord shall not be obligated to make such payment in the amount of the unused L-C proceeds until either all preference issues relating to payments under this Lease have been resolved in such bankruptcy or reorganization case or such bankruptcy or reorganization case has been dismissed.

2 1.5 **L-C Not a Security Deposit**. Landlord and Tenant (1) acknowledge and agree that in no event or circumstance shall the L-C or any renewal thereof or substitute therefor or any proceeds thereof be deemed to be or treated as a "security deposit" under any law applicable to security deposits in the commercial context, including, but not limited to, Section 1950.7 of the California Civil Code, as such Section now exists or as it may be hereafter amended or succeeded (the "**Security Deposit Laws**"), (2) acknowledge and agree that the L-C (including any renewal thereof or substitute therefor or any proceeds thereof) is not intended to serve as a security deposit, and the Security Deposit Laws shall have no applicability or relevancy thereto, and (3) waive any and all rights, duties and

obligations that any such party may now, or in the future will, have relating to or arising from the Security Deposit Laws. Tenant hereby irrevocably waives and relinquishes the provisions of Section 1950.7 of the California Civil Code and any successor statue, and all other provisions of law, now or hereafter in effect, which (x) establish the time frame by which a landlord must refund a security deposit under a lease, and/or (y) provide that a landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by a tenant or to clean the premises, it being agreed that Landlord may, in addition, claim those sums specified in this Article 21 and/or those sums reasonably necessary to (a) compensate Landlord for any loss or damage caused by Tenant's breach of this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), including any damages Landlord suffers following termination of this Lease, and/or (b) compensate Landlord for any and all damages arising out of, or incurred in connection with, the termination of this Lease, including, without limitation, those specifically identified in Section 1951.2 of the California Civil Code.

ARTICLE 22

LANDLORD DEFAULT

Notwithstanding any provision to the contrary contained in this Lease, Landlord shall not be in default in the performance of any obligation required to be performed by Landlord pursuant to this Lease unless Landlord fails to perform such obligation within thirty (30) days after the receipt of written notice from Tenant specifying in detail Landlord's failure to perform; provided, however, if the nature of Landlord's obligation is such that more than thirty (30) days are reasonably required for its performance, then Landlord shall not be in default under this Lease if it shall commence such performance within such thirty (30) day period and thereafter diligently pursue the same to completion. Upon any such default by Landlord under this Lease, Tenant may, except as otherwise specifically provided in this Lease to the contrary, exercise any of its rights provided at law or in equity.

ARTICLE 23

SIGNS

23.1 **Signage.** Subject to Landlord's prior written approval, which shall not be unreasonably withheld, conditioned, or delayed, and provided all signs are in keeping with the quality, design and style of the Building and Project, Tenant, at its sole cost and expense, may install identification signage (i) on one (1) panel, as designated by Landlord, on the existing monument sign located at the exterior of the Project, (ii) on the exterior door to the Building and in the lobby and common areas of the building (including internal directional and lobby identification signage and directory), and (iii) on the exterior of the Building, all in a manner and with signage approved in advance by Landlord and in keeping with the quality, design and style of the Building and Project. All permitted signs shall be maintained by Tenant at its expense in a first-class and safe condition and appearance. Upon the expiration or earlier termination of this Lease, Tenant shall remove all of its signs at Tenant's sole cost and expense. Tenant shall repair any damage to the Premises or Project, inside or outside, resulting from the erection, maintenance or removal of any signs by Tenant.

23.2 **Prohibited Signage and Other Items.** Any signs, notices, logos, pictures, names or advertisements which are installed and that have not been separately approved by Landlord may be removed without notice by Landlord at the sole expense of Tenant. Except as provided in Section 23.l, Tenant may not install any signs on the exterior or roof of the Project or the Common Areas. Any signs, window coverings, or blinds (even if the same are located behind the Landlord-approved window coverings for the Building), or other items visible from the exterior of the Premises or Building, shall be subject to the prior approval of Landlord, which shall not be unreasonably withheld, conditioned or delayed.

ARTICLE 24

COMPLIANCE WITH LAW

Tenant shall not do anything or suffer anything to be done in or about the Premises or the Project which will in any way conflict with any law, statute, ordinance or other governmental rule, regulation or requirement now in force or which may hereafter be enacted or promulgated **("Applicable Laws").** Tenant shall, at its sole cost and expense, promptly comply with any Applicable Laws which relate to (i) Tenant's use of the Premises, (ii) any Alterations made by Tenant to the Premises, or (iii) the Base Building, but as to the Base Building, only to the extent such obligations are triggered by Alterations made by Tenant to the Premises. Should any standard or regulation now or hereafter be imposed on Tenant by a state, federal or local governmental body charged with the establishment, regulation and enforcement of occupational, health or safety standards for employers or employees, then Tenant agrees, at its sole cost and expense, to comply promptly with such standards or regulations. Tenant shall be responsible, at its sole cost and expense, to make all alterations to the Premises as are required to comply with the governmental rules, regulations, requirements or standards described in the preceding sentence. The judgment of any court of competent jurisdiction or the admission of Tenant in any judicial action, regardless of whether Landlord is a party thereto, that Tenant has violated any of said governmental measures, shall be conclusive of that fact as between Landlord and Tenant. Landlord shall comply with all Applicable Laws relating to the Project (including the Common Areas), and Base Building, provided that compliance with such Applicable Laws is not the responsibility of Tenant under this Lease, and provided further that Landlord's failure to comply therewith would prohibit Tenant from obtaining or maintaining a certificate of occupancy for the Premises, or would unreasonably and materially affect the safety of Tenant's employees or create a significant health hazard for Tenant's employees. Landlord shall be permitted to include in Operating Expenses any costs or expenses incurred by Landlord under this Article 24 to the extent consistent with the terms of Section 4.2.3 and 5.3, above.

ARTICLE 25

LATE CHARGES

If any installment of Rent or any other sum due from Tenant shall not be received by Landlord or Landlord's designee within five (5) business days after Tenant's receipt of written notice from Landlord that said amount is due, then Tenant shall pay to Landlord a late charge equal to five percent (5%) of the overdue amount plus any reasonable attorneys' fees incurred by Landlord by reason of Tenant's failure to pay Rent and/or other charges when due hereunder. The late charge shall be deemed Additional Rent and the right to require it shall be in addition to all of Landlord's other rights and remedies hereunder or at law and shall not be construed as liquidated damages or as limiting Landlord's remedies in any manner. In addition to the late charge described above, any Rent or other amounts owing hereunder which are not paid within ten (10) days after the date they are due shall bear interest from the date when due until paid at a rate per annum equal to the lesser of (i) the annual **"Bank Prime Loan"** rate cited in the Federal Reserve Statistical Release Publication G .13(415) , published on the first Tuesday of each calendar month (or such other comparable index as Landlord and Tenant shall reasonably agree upon if such rate ceases to be published) plus two (2) percentage points, and (ii) the highest rate permitted by applicable law.

ARTICLE 26

LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT

26.1 **Landlord's Cure.** All covenants and agreements to be kept or performed by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any reduction of Rent, except to the extent, if any, otherwise expressly provided herein. If Tenant shall fail to perform any obligation under this Lease, and such failure shall continue beyond applicable notice and cure periods, Landlord may, but shall not be obligated to, make any such payment or perform any such act on Tenant's part without waiving its rights based upon any default of Tenant and without releasing Tenant from any obligations hereunder.

26.2 **Tenant's Reimbursement.** Except as may be specifically provided to the contrary in this Lease, Tenant shall pay to Landlord, within ten (10) business days after delivery by Landlord to Tenant of statements

therefor, sums equal to expenditures reasonably made and obligations reasonably incurred by Landlord in connection with the remedying by Landlord of Tenant's defaults pursuant to the provisions of Section 26.1. Tenant's obligations under this Section 26.2 shall survive the expiration or sooner termination of the Lease Term.

ARTICLE27

ENTRY BY LANDLORD

Landlord reserves the right at all reasonable times and upon not less than 24 hour prior notice to Tenant (except in the case of an emergency) to enter the Premises to (i) inspect them; (ii) show the Premises to prospective purchasers, or to current or prospective mortgagees, ground or underlying lessors or insurers or, during the last nine (9) months of the Lease Term, to prospective tenants; (iii) post notices of nonresponsibility (to the extent applicable pursuant to then applicable law); or (iv) alter, improve or repair the Premises or the Building, or for structural alterations, repairs or improvements to the Building or the Building's systems and equipment or (v) perform services required of Landlord hereunder. Notwithstanding anything to the contrary contained in this Article 27, Landlord may enter the Premises at any time to (A) take possession due to any breach of this Lease in the manner provided herein and in compliance with Applicable Laws; and (B) perform any covenants of Tenant which Tenant fails, after notice and a reasonable opportunity to cure, to perform. Landlord may make any such entries without the abatement of Rent, except as otherwise provided in this Lease, and may take such reasonable steps as required to accomplish the stated purposes. In connection with any such entry, Landlord shall use commercially reasonable efforts to minimize interference with Tenant's use of and business conducted in the Premises. Except with respect to personal injury or property damage to the extent caused by the gross negligence or intentional acts of Landlord or Landlord Parties, Tenant hereby waives any claims for damages or for any injuries or inconvenience to or interference with Tenant's business, lost profits, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned thereby. For each of the above purposes, Landlord shall at all times have a key with which to unlock all the doors in the Premises, excluding Tenant's vaults, safes and special security areas designated in advance by Tenant. In an emergency, Landlord shall have the right to use any means that Landlord may deem proper to open the doors in and to the Premises. Any entry into the Premises by Landlord in the manner hereinbefore described shall not be deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an actual or constructive eviction of Tenant from any portion of the Premises. No provision of this Lease shall be construed as obligating Landlord to perform any repairs, alterations or decorations except as otherwise expressly agreed to be performed by Landlord herein.

ARTICLE28

TENANT PARKING

Commencing on the Lease Commencement Date, Tenant shall have the right, at no additional charge, to use the amount of parking set forth in Section 9 of the Summary, throughout the Lease Term in the on-site parking facility (or facilities) which serve the Project. Tenant shall be responsible for the full amount of any taxes imposed by any governmental authority in connection with the renting of such parking passes by Tenant or the use of the parking facility by Tenant. Tenant's continued right to use the Project parking is conditioned upon Tenant abiding by all reasonable rules and regulations which are prescribed from time to time for the orderly operation and use of the parking facility where the parking is located (including any sticker or other identification system established by Landlord and the prohibition of vehicle repair and maintenance activities in the parking facilities), Tenant's cooperation in seeing that Tenant's employees and visitors also comply with such rules and regulations. Tenant's use of the Project parking facility shall be at Tenant's sole risk and Tenant acknowledges and agrees that Landlord shall have no liability whatsoever for damage to the vehicles of Tenant, its employees and/or visitors, or for other personal injury or property damage or theft relating to or connected with the parking rights granted herein or any of Tenant's, its employees' and/or visitors' use of the parking facilities. Tenant's rights hereunder are subject to the terms of any Underlying Documents now in effect. Landlord specifically reserves the right to change the size, configuration, design, layout, location and all other aspects of the parking facility serving the Project at any time and Tenant acknowledges and agrees that, so long as Tenant's access to and use of the Premises is not thereby materially impaired, Landlord may, without incurring any liability to Tenant and without any abatement of Rent under this Lease, from time to time, temporarily close-off or restrict access to the Project parking facility for purposes of

permitting or facilitating any such construction, alteration or improvements. In connection with any such actions, Landlord shall use commercially reasonable efforts to minimize interference with Tenant's use of the Project parking areas. Landlord reserves the right to require attended parking from time to time. Landlord may delegate its responsibilities hereunder to a parking operator in which case such parking operator shall have all the rights of control attributed hereby to the Landlord. The parking passes are provided to Tenant solely for use by Tenant's own personnel and such passes may not be transferred, assigned, subleased or otherwise alienated by Tenant without Landlord's prior approval.

ARTICLE 29

MISCELLANEOUS PROVISIONS

29.l **Terms; Captions**. The words "**Landlord**" and "**Tenant**" as used herein shall include the plural as well as the singular. The necessary grammatical changes required to make the provisions hereof apply either to corporations or partnerships or individuals, men or women, as the case may require, shall in all cases be assumed as though in each case fully expressed. Except as otherwise explicitly specified to the contrary or unless the context clearly requires otherwise, the word "including" will be construed as "including without limitation". The captions of Articles and Sections are for convenience only and shall not be deemed to limit, construe, affect or alter the meaning of such Articles and Sections.

29.2 **Binding Effect**. Subject to all other provisions of this Lease, each of the covenants, conditions and provisions of this Lease shall extend to and shall, as the case may require, bind or inure to the benefit not only of Landlord and of Tenant, but also of their respective heirs, personal representatives, successors or assigns, provided this clause shall not permit any assignment by Tenant contrary to the provisions of Article 14 of this Lease.

29.3 **No Air Rights**. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light or view therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Project, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

29.4 **Modification of Lease**. Should any current or prospective mortgagee or ground lessor for the Building or Project require a modification of this Lease, which modification will not cause an increased cost or expense to Tenant or in any other way materially and adversely change the rights and obligations of Tenant hereunder, then and in such event, Tenant agrees that this Lease may be so modified and agrees to execute whatever documents are reasonably required therefor and to deliver the same to Landlord within fifteen (15) business days following a request therefor. At the request of Landlord or any mortgagee or ground lessor, Tenant agrees to execute a short form of Lease, in form and substance reasonably acceptable to Tenant, and deliver the same to Landlord within fifteen (15) business days following the request therefor.

29.5 **Transfer of Landlord's Interest**. Tenant acknowledges that Landlord has the right to transfer all or any portion of its interest in the Project or Building and in this Lease, and Tenant agrees that in the event of any such transfer, Landlord shall automatically be released from all liability under this Lease accruing from and after the date of such transfer and Tenant agrees to look solely to such transferee for the performance of Landlord's obligations hereunder after the date of transfer, provided that such transferee shall be have fully assumed and shall be liable for all obligations of this Lease to be performed by Landlord, including the return of any Security Deposit, and Tenant shall attorn to such transferee.

29.6 **Prohibition Against Recording**. Except as provided in Section 29.4 of this Lease, neither this Lease, nor any memorandum, affidavit or other writing with respect thereto, shall be recorded by Tenant or by anyone acting through, under or on behalf of Tenant.

29.7 **Landlord's Title**. Landlord's title is and always shall be paramount to the title of Tenant. Nothing herein contained shall empower Tenant to do any act which can, shall or may encumber the title of Landlord.

29.8 **Relationship of Parties**. Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent, partnership,joint venturer or any association between Landlord and Tenant other than as landlord and tenant hereunder.

29.9 **Application of Payments**. If Tenant is in default under this Lease (beyond the expiration of any applicable notice and cure period expressly set forth in this Lease), Landlord shall have the right to apply payments received from Tenant pursuant to this Lease, regardless of Tenant's designation of such payments, to satisfy any obligations of Tenant hereunder, in such order and amounts as Landlord, in its sole discretion, may elect.

29.10 **Time of Essence**. Time is of the essence with respect to the performance of every provision of this Lease in which time of performance is a factor.

29.11 **Partial Invalidity**. If any term, provision or condition contained in this Lease shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, provision or condition to persons or circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and each and every other term, provision and condition of this Lease shall be valid and enforceable to the fullest extent possible permitted by law.

29.12 **No Warranty**. In executing and delivering this Lease, Tenant has not relied on any representations, except as expressly set forth in this Lease, including, but not limited to, any representation as to the amount of any item comprising Additional Rent or the amount of the Additional Rent in the aggregate or that Landlord is furnishing the same services to other tenants, at all, on the same level or on the same basis, or any warranty or any statement of Landlord which is not set forth herein or in one or more of the exhibits attached hereto.

29.13 **Landlord Exculpation**. The liability of Landlord or the Landlord Parties to Tenant for any default by Landlord under this Lease or arising in connection herewith or with Landlord's operation, management, leasing, repair, renovation, alteration or any other matter relating to the Project or the Premises shall be limited solely and exclusively to an amount which is equal to the interest of Landlord in the Project. Neither Landlord, nor any of the Landlord Parties shall have any personal liability therefor, and Tenant hereby expressly waives and releases such personal liability on behalf of itself and all persons claiming by, through or under Tenant. The limitations of liability contained in this Section 29.13 shall inure to the benefit of Landlord's and the Landlord Parties' present and future partners, beneficiaries, officers, directors, trustees, shareholders, agents and employees, and their respective partners, heirs, successors and assigns. Under no circumstances shall any present or future partner of Landlord (if Landlord is a partnership), or trustee or beneficiary (if Landlord or any partner of Landlord is a trust), have any liability for the performance of Landlord's obligations under this Lease. Notwithstanding any contrary provision herein, neither Landlord nor the Landlord Parties shall be liable under any circumstances for injury or damage to, or interference with, Tenant's business, including but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, in each case, however occurring, or loss to inventory, scientific research, scientific experiments, laboratory animals, products, specimens, samples, and/or scientific, business, accounting and other records of every kind and description kept at the premises and any and all income derived or derivable therefrom.

29.14 **Entire Agreement**. It is understood and acknowledged that there are no oral agreements between the parties hereto affecting this Lease and this Lease constitutes the parties' entire agreement with respect to the leasing of the Premises and supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between the parties hereto or displayed by Landlord to Tenant with respect to the subject matter thereof, and none thereof shall be used to interpret or construe this Lease. None of the terms, covenants, conditions or provisions of this Lease can be modified, deleted or added to except in writing signed by the parties hereto.

29.15 **Right to Lease**. Landlord reserves the absolute right to effect such other tenancies in the Project as Landlord in the exercise of its sole business judgment shall determine to best promote the interests of the Building or Project. Tenant does not rely on the fact, nor does Landlord represent, that any specific tenant or type or number of tenants shall, during the Lease Term, occupy any space in the Building or Project.

29.16 **Force Majeure**. Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, civil commotions, fire or other casualty, and other causes beyond the reasonable control of the party obligated to perform, except with respect to the obligations imposed with regard to the payment of monetary obligation (including Rent) pursuant to this Lease (collectively, a "**Force Majeure**"), notwithstanding anything to the contrary contained in this Lease, shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage and, therefore, if this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure.

29.17 **Waiver of Redemption by Tenant**. Tenant hereby waives, for Tenant and for all those claiming under Tenant, any and all rights now or hereafter existing to redeem by order or judgment of any court or by any legal process or writ, Tenant's right of occupancy of the Premises after any termination of this Lease pursuant to the terms hereof.

29.18 **Notices**. All notices, demands, statements, designations, approvals or other communications (collectively, "**Notices**") given or required to be given by either party to the other hereunder or by law shall be in writing, shall be (A) sent by United States certified or registered mail, postage prepaid, return receipt requested ("**Mail**"), (B) transmitted by telecopy, if such telecopy is contemporaneously followed by a Notice sent by Mail, (C) delivered by a nationally recognized overnight courier, or (D) delivered personally. Any Notice shall be sent, transmitted, or delivered, as the case may be, to Tenant at the appropriate address set forth in Section 10 of the Summary, or to such other place as Tenant may from time to time designate in a Notice to Landlord, or to Landlord at the addresses set forth below, or to such other places as Landlord may from time to time designate in a Notice to Tenant. Any Notice will be deemed given (i) three (3) days after the date it is posted if sent by Mail, (ii) the date the telecopy is transmitted, (iii) the date the overnight courier delivery is made, or (iv) the date personal delivery is made. As of the date of this Lease, any Notices to Landlord must be sent, transmitted, or delivered, as the case may be, to the following addresses:

HCP LS Redwood City, LLC
c/o HCP Estates USA Inc.
444 North Michigan Avenue, Suite 3230
Chicago, IL 60611
Attn: Randy Rohner
Fax: (312) 755-0717

with a copy to:

HCP LS Redwood City, LLC
c/o HCP, Inc.
3760 Kilroy Airport Way, Suite 300
Long Beach, CA 90806-2473
Attn: Legal Department
Fax: (562) 733-5219

and:

HCP Life Science Estates
400 Oyster Point Boulevard, Suite 409
South San Francisco, CA 94080
Attention: Jon Bergschneider

and

Allen Matkins Leck Gamble Mallory & Natsis LLP
1901 Avenue of the Stars

Suite 1800
Los Angeles, California 90067
Attention: Anton N. Natsis, Esq.

29.19 **Joint and Several**. If there is more than one Tenant, the obligations imposed upon Tenant under this Lease shall be joint and several.

29.20 **Authority**. If Tenant is a corporation, trust or partnership, each individual executing this Lease on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in the State of California and that Tenant has full right and authority to execute and deliver this Lease and that each person signing on behalf of Tenant is authorized to do so.

29.21 **Attorneys' Fees**. In the event that either Landlord or Tenant should bring suit for the possession of the Premises, for the recovery of any sum due under this Lease, to interpret the Lease, or because of the breach of any provision of this Lease or for any other relief against the other, then all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party therein shall be paid by the other party, which obligation on the part of the other party shall be deemed to have accrued on the date of the commencement of such action and shall be enforceable whether or not the action is prosecuted to judgment.

29.22 **Governing Law; WAIVER OF TRIAL BY JURY**. This Lease shall be construed and enforced in accordance with the laws of the State of California. IN ANY ACTION OR PROCEEDING ARISING HEREFROM, LANDLORD AND TENANT HEREBY CONSENT TO (I) THE JURISDICTION OF ANY COMPETENT COURT WITHIN THE STATE OF CALIFORNIA, (II) SERVICE OF PROCESS BY ANY MEANS AUTHORIZED BY CALIFORNIA LAW, AND (III) IN THE INTEREST OF SAVING TIME AND EXPENSE, TRIAL WITHOUT A JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THE PARTIES HERETO AGAINST THE OTHER OR THEIR SUCCESSORS IN RESPECT OF ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, AND/OR ANY CLAIM FOR INJURY OR DAMAGE, OR ANY EMERGENCY OR STATUTORY REMEDY.

29.23 **Submission of Lease**. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of, option for or option to lease, and it is not effective as a lease or otherwise until execution and delivery by both Landlord and Tenant.

29.24 **Brokers**. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Lease, excepting only the real estate brokers or agents specified in Section 12 of the Summary (the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Lease. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party. Landlord shall be responsible to pay the Brokers any compensation, commissions or charges payable in connection with this Lease. The terms of this Section 29.24 shall survive the expiration or earlier termination of the Lease Term.

29.25 **Independent Covenants**. This Lease shall be construed as though the covenants herein between Landlord and Tenant are independent and not dependent and Tenant hereby expressly waives the benefit of any statute to the contrary and agrees that if Landlord fails to perform its obligations set forth herein, Tenant shall not be entitled to make any repairs or perform any acts hereunder at Landlord's expense or to any setoff of the Rent or other amounts owing hereunder against Landlord.

29.26 **Project or Building Name, Address and Signage**. Landlord shall have the right at any time to change the name and/or address of the Project or Building and to install, affix and maintain any and all signs on the exterior and on the interior of the Project or Building as Landlord may, in Landlord's sole discretion, desire. Tenant shall not use the name of the Project or Building or use pictures or illustrations of the Project or Building in

advertising or other publicity or for any purpose other than as the address of the business to be conducted by Tenant in the Premises, without the prior written consent of Landlord.

29.27 **Counterparts.** This Lease may be executed in counterparts with the same effect as if both parties hereto had executed the same document. Both counterparts shall be construed together and shall constitute a single lease.

29.28 **Confidentiality.** Tenant acknowledges that the content of this Lease and any related documents are confidential information (to the extent such information is not public). Tenant shall keep such confidential information strictly confidential and shall not disclose such confidential information to any person or entity, except (i) as provided in Section 29.6 above, (ii) to Tenant's officers, directors, employees, agents, advisors, representatives and consultants who have been informed of the confidential nature of such information, (iii) if Tenant is required to be disclosed such information by law or by judicial or administrative process or (iv) in connection with any enforcement of the terms of this Lease in any legal or arbitration proceeding.

29.29 **Development of the Project.**

29.29.1 **Subdivision.** So long as Tenant's rights and obligations hereunder are not materially adversely affected, Landlord reserves the right to subdivide all or a portion of the buildings and Common Areas. Tenant agrees to execute and deliver, upon demand by Landlord and in the form reasonably requested by Landlord, any additional documents needed to conform this Lease to the circumstances resulting from a subdivision and any all maps in connection therewith. Notwithstanding anything to the contrary set forth in this Lease, the separate ownership of any buildings and/or Common Areas by an entity other than Landlord shall not affect the calculation of Direct Expenses or Tenant's payment of Tenant's Share of Direct Expenses.

29.29.2 **Construction of Property.** Tenant acknowledges that portions of the Project and/or the Other Improvements may be under construction following Tenant's occupancy of the Premises, and that such construction may result in levels of noise, dust, obstruction of access, etc. which are in excess of that present in a fully constructed project. Tenant hereby waives any and all rent offsets or claims of constructive eviction which may arise in connection with such construction. Landlord shall use commercially reasonable efforts to minimize interference with Tenant's use of and access to the Premises and parking areas in connection with any such construction.

29.30 **No Violation.** Tenant hereby warrants and represents that neither its execution of nor performance under this Lease shall cause Tenant to be in violation of any agreement, instrument, contract, law, rule or regulation by which Tenant is bound, and Tenant shall protect, defend, indemnify and hold Landlord harmless against any claims, demands, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable attorneys' fees and costs, arising from Tenant's breach of this warranty and representation.

29.31 **Communications and Computer Lines.** Tenant may install, maintain, replace, remove or use any communications or computer wires and cables serving the Premises (collectively, the **"Lines"),** provided that (i) Tenant shall obtain Landlord's prior written consent, use an experienced and qualified contractor approved in writing by Landlord, and comply with all of the other provisions of Articles 7 and 8 of this Lease, (ii) an acceptable number of spare Lines and space for additional Lines shall be maintained for existing and future occupants of the Project, as determined in Landlord's reasonable opinion, (iii) the Lines therefor (including riser cables) shall be appropriately insulated to prevent excessive electromagnetic fields or radiation, shall be surrounded by a protective conduit reasonably acceptable to Landlord, and shall be identified in accordance with the "Identification Requirements," as that term is set forth hereinbelow, (iv) any new or existing Lines servicing the Premises shall comply with all applicable governmental laws and regulations, (v) as a condition to permitting the installation of new Lines, Landlord may require that Tenant remove existing Lines located in or serving the Premises and repair any damage in connection with such removal, and (vi) Tenant shall pay all costs in connection therewith. All Lines shall be clearly marked with adhesive plastic labels (or plastic tags attached to such Lines with wire) to show Tenant's name, suite number, telephone number and the name of the person to contact in the case of an emergency (A) at reasonable intervals outside the Premises (specifically including, but not limited to, the electrical room risers and other Common Areas), and (B) at the Lines' termination point(s) (collectively, the **"Identification Requirements").**

Landlord reserves the right, upon notice to Tenant prior to the expiration or earlier termination of this Lease, to require that Tenant, at Tenant's sole cost and expense, remove any Lines installed by or on behalf of Tenant located in or serving the Premises prior to the expiration or earlier termination of this Lease.

29.32 **Rooftop Access**. During the Lease Term Tenant shall have the right to access the building roof top for the purposes of maintaining the Building HVAC system, and for the installation and maintenance, at Tenant's sole cost and expense, but without the payment of any Rent or a license or similar fee or charge, of a satellite or microwave dish (not to exceed 24" in diameter) or antenna(s), or other equipment directly servicing the business conducted by Tenant from within the Premises (all such equipment, including non-telecommunication equipment is, for the sake of convenience, defined collectively as the "**Telecommunications Equipment**"). The installation of any Telecommunications Equipment, and any work by Tenant on the Building HY AC system, shall be subject to Landlord's prior written approval, which approval will not be unreasonably withheld, conditioned, or delayed, and Tenant shall provide detailed specifications to Landlord in connection therewith, and shall cooperate with Landlord to ensure that no work on the roof in connection therewith would damage the roof membrane or adversely affect any existing roof warranty. The particular location of any such Telecommunications Equipment shall be reasonably determined by Landlord, and Landlord may require Tenant to install screening around such Telecommunications Equipment, at Tenant's sole cost and expense, as reasonably determined by Landlord. Tenant shall maintain such Telecommunications Equipment, at Tenant's sole cost and expense. In the event Tenant elects to exercise its right to install the Telecommunication Equipment, then Tenant shall give Landlord prior notice thereof. Tenant shall remove any Telecommunications Equipment upon the expiration or earlier termination of this Lease and shall return the affected portion of the rooftop and the Building to the condition the rooftop and the Building would have been in had no such Telecommunications Equipment been installed (reasonable wear and tear and damage by fire or other casualty excepted). Such Telecommunications Equipment shall be installed pursuant to plans and specifications approved by Landlord, which approval will not be unreasonably withheld, conditioned, or delayed. Such Telecommunications Equipment shall, in all instances, comply with applicable laws.

IN WITNESS WHEREOF, Landlord and Tenant have caused this Lease to be executed the day and date first above written.

LANDLORD:

HCP LS REDWOOD CITY, LLC,
a Delaware limited liability company

By: HCP Estates USA Inc.,
a Delaware corporation,
its Manager

By: /s/ John Bergschneider
John Bergschneider
Senior Vice president

TENANT:

PULMONX, INC.,
a California corporation

By: /s/ NIYAZI BEYHAN
NIYAZI BEYHAN
Print Name
Its: EXEC VP & GM

By: _____
Print Name
Its: _____

EXHIBIT A

BRITANNIA SEAPORT CENTRE

OUTLINE OF PREMISES

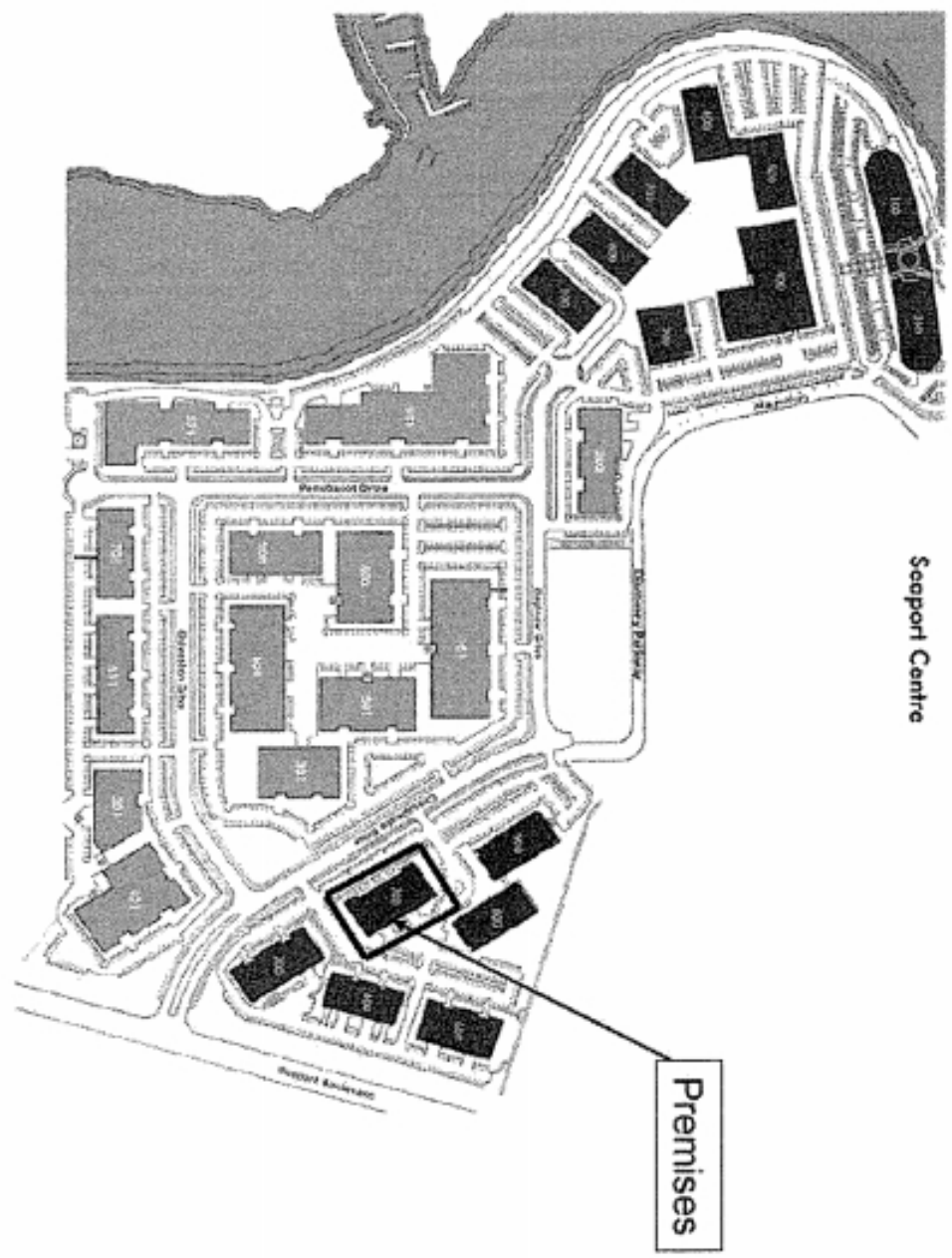

EXHIBIT A-1

BRITANNIA SEAPORT CENTRE

PROJECT LEGAL DESCRIPTION

LOTS 1 THROUGH 7, INCLUSIVE, AS DESIGNATED ON THE MAP ENTITLED, "SEAPORT CENTER UNIT III, CITY OF REDWOOD CITY, SAN MATEO COUNTY, CALIFORNIA", FILED OCTOBER 15, 1987, IN VOLUME 117 OF MAPS, AT PAGES 17 THROUGH 21,

IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SAN MATEO.

EXCEPTING FROM LOTS 1 THROUGH 5 AND LOT 7, THOSE CERTAIN IMPROVMENTS DESCRIBED IN THAT CERTAIN DEED OF CONVEYANCE FROM SEAPORT CENTRE VENTURE TO THE CITY OF REDWOOD CITY, DATED DECEMBER 16, 1985 AND RECORDED JANUARY 10, 1986, AS DOCUMENT NO. 86003623, SAN MATEO COUNTY RECORDS.

ASSESSORS' PARCEL NOS. 054-320-310 THROUGH 054-320-390

JOINT PLANT NOS. 117-017-000-0001 THROUGH 117-017-000-0007T

EXHIBIT B

BRITANN IA SEAPORT CENTRE

INTENTIONALLY OMITTED
EXHIBIT C

BRITANN IA SEAPORT CENTRE

NOTICE OF LEASE TERM DATES

To: _____

_____

_____

_____

Re: Lease dated, _____200_ between _____, a_____ ("**Landlord**"), and_____, a _____ ("**Tenant**") concerning Suite _____ on floor(s)_____of the building located at [**INSERT BUILDING ADDRESS**].

Gentlemen:

In accordance with the Lease (the "Lease"), we wish to advise you and/or confirm as follows:

1. The Lease Term shall commence on or has commenced on _____ for a term of _____ending on _____.

2. Rent commenced to accrue on _____, in the amount of _____.

3. If the Lease Commencement Date is other than the first day of the month, the first billing will contain a pro rata adjustment. Each billing thereafter, with the exception of the final billing, shall be for the full amount of the monthly installment as provided for in the Lease.

4. Your rent checks should be made payable to _____ at _____.

5. The exact number of rentable square feet within the Premises is _____ square feet.

6. Tenant's Share as adjusted based upon the exact number of usable square feet within the Premises is _____%.

"Landlord":

_____, a
_____

By: _____

Its _____

Agreed to and Accepted as
of _____ , 200_.

"Tenant":

_____, a
_____

By: _____

its _____

EXHIBIT D

BRITANNIA SEAPORT CENTRE

INTENTIONALLY OMITTED

EXHIBIT E

BRITANNIA SEAPORT CENTRE

FORM OF TENANT'S ESTOPPEL CERTIFICATE

The undersigned as Tenant under that certain Office Lease (the "**Lease**") made and entered into as of _____, 200_ by and between _____ as Landlord, and the undersigned as Tenant, for Premises on the _____floor(s) of the office building located at **[INSERT BUILDING ADDRESS]**, certifies as follows:

1. Attached hereto as **Exhibit A** is a true and correct copy of the Lease and all amendments and modifications thereto. The documents contained in **Exhibit A** represent the entire agreement between the parties as to the Premises.

2. The undersigned currently occupies the Premises described in the Lease, the Lease Term commenced on _____, and the Lease Term expires on _____, and the undersigned has no option to terminate or cancel the Lease or to purchase all or any part of the Premises, the Building and/or the Project.

3. Base Rent became payable on _____.

4. The Lease is in full force and effect and has not been modified, supplemented or amended in any way except as provided in **Exhibit A**.

5. Tenant has not transferred, assigned, or sublet any portion of the Premises nor entered into any license or concession agreements with respect thereto except as follows:

6. Intentionally Omitted.

7. All monthly installments of Base Rent, all Additional Rent and all monthly installments of estimated Additional Rent have been paid when due through _____. The current monthly installment of Base Rent is $ _____.

8. To Tenant's knowledge, all conditions of the Lease to be performed by Landlord necessary to the enforceability of the Lease have been satisfied and Landlord is not in default thereunder. In addition, the undersigned has not delivered any notice to Landlord regarding a default by Landlord thereunder. The Lease does not require Landlord to provide any rental concessions.

9. No rental has been paid more than thirty (30) days in advance and no security has been deposited with Landlord except as provided in the Lease. Neither Landlord, nor its successors or assigns, shall in any event be liable or responsible for, or with respect to, the retention, application and/or return to Tenant of any security deposit paid to any prior landlord of the Premises, whether or not still held by any such prior landlord, unless and until the party from whom the security deposit is being sought, whether it be a lender, or any of its successors or assigns, has actually received for its own account, as landlord, the full amount of such security deposit.

10. As of the date hereof, to the undersigned's knowledge, there are no existing defenses or offsets, or, to the undersigned's knowledge, claims or any basis for a claim, that the undersigned has against Landlord.

11. If Tenant is a corporation or partnership, each individual executing this Estoppel Certificate on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in California and that Tenant has full right and authority to execute and deliver this Estoppel Certificate and that each person signing on behalf of Tenant is authorized to do so.

12. There are no actions pending against the undersigned under the bankruptcy or similar laws of the United States or any state.

13. Intentionally Omitted.

14. To the undersigned's knowledge, all tenant improvement work to be performed by Landlord under the Lease has been completed in accordance with the Lease and has been accepted by the undersigned and all reimbursements and allowances due to the undersigned under the Lease in connection with any tenant improvement work have been paid in full. All work (if any) in the common areas required by the Lease to be completed by Landlord (other than Landlord's ongoing repair and maintenance obligations under the Lease) has been completed and all parking spaces required by the Lease have been furnished and/or all parking ratios required by the Lease have been met.

The undersigned acknowledges that this Estoppel Certificate may be delivered to Landlord or to a prospective mortgagee or prospective purchaser, and acknowledges that said prospective mortgagee or prospective purchaser will be relying upon the statements contained herein in making the loan or acquiring the property of which the Premises are a part and that receipt by it of this certificate is a condition of making such loan or acquiring such property.

Executed at _____ on the _____ day of _____, 200_.

"Tenant":

_____

a _____

By: _____

Its _____

By: _____

Its _____

EXHIBIT F

MARKET RENT ANALYSIS

When determining Market Rent, the following rules and instructions shall be followed.

1. **RELEVANT FACTORS**. The "Market Rent," as used in this Lease, shall be derived from an analysis (as such derivation and analysis are set forth in this **Exhibit F**) of the "Net Equivalent Lease Rates," of the "Comparable Transactions". The "**Market Rent**," as used in this Lease, shall be equal to the annual rent per rentable square foot as would be applicable on the commencement of the Option Term at which tenants, are, pursuant to transactions consummated within the twelve (12) month period immediately preceding the first day of the Option Term (provided that timing adjustments shall be made to reflect any perceived changes which will occur in the Market Rent following the date of any particular Comparable Transaction up to the date of the commencement of the Option Term) leasing non-sublease, non-encumbered, non-equity space comparable in location and quality to the Premises and consisting of one full floor or greater transactions, for a comparable term, in an arm's-length transaction, which comparable space is located in the "Comparable Buildings," as that term is defined in Section 4, below (transactions satisfying the foregoing criteria shall be known as the "**Comparable Transactions**"). The terms of the Comparable Transactions shall be calculated as a Net Equivalent Lease Rate pursuant to the terms of this **Exhibit F** and shall take into consideration all relevant factors, including the following terms and concessions: (i) the rental rate and escalations for the Comparable Transactions, (ii) the amount of parking rent per parking permit paid in the Comparable Transactions, (iii) operating expense and tax escalation protection granted in such Comparable Transactions such as a base year or expense stop (although for each such Comparable Transaction the base rent shall be adjusted to a triple net base rent using reasonable estimates of operating expenses and taxes); (iv) tenant improvements or allowances provided or to be provided for such comparable space, taking into account, the value of the existing improvements, if any, in the Premises, such value of existing improvements to be based upon the age, quality and layout of the improvements and the extent to which the same could be utilized by general office users (as contrasted to the Tenant), and (v) rental abatement concessions, if any, being granted such tenants in connection with such comparable space; provided, however, that no consideration shall be given to (1) the fact that Landlord is or is not required to pay a real estate brokerage commission in connection with the applicable term or the fact that the Comparable Transactions do or do not involve the payment of real estate brokerage commissions, and (2) any period of rental abatement, if any, granted to tenants in Comparable Transactions in connection with the design, permitting and construction of tenant improvements in such comparable spaces. The Market Rent shall include adjustment of the stated size of the Premises, based upon the standards of measurement utilized in the Comparable Transactions. In no event shall Alterations or improvements constructed by Tenant at Tenant's cost be considered in determining the comparability of other space.

2. **TENANT SECURITY**. The Market Rent shall additionally include a determination as to whether, and if so to what extent, Tenant must provide Landlord with financial security, such as a letter of credit or guaranty, for Tenant's Rent obligations during the Option Term. Such determination shall be made by reviewing the extent of financial security then generally being imposed in Comparable Transactions from tenants of comparable financial condition and credit history to the then existing financial condition and credit history of Tenant (with appropriate adjustments to account for differences in the then-existing financial condition of Tenant and such other tenants).

3. **TENANT IMPROVEMENT ALLOWANCE**. If, in determining the Market Rent for an Option Term, Tenant is entitled to a tenant improvement or comparable allowance for the improvement of the Option Space (the "**Option Term Tl Allowance**"), Landlord may, at Landlord's sole option, elect to grant all or a portion of the Option Term TI Allowance in accordance with the following: (A) to grant some or all of the Option Term TI Allowance to Tenant in the form as described above (i.e., as an improvement allowance), and/or (B) to offset against the rental rate component of the Market Rent all or a portion of the Option Term TI Allowance (in which case such portion of the Option Term TI Allowance provided in the form of a rental offset shall not be granted to Tenant). To the extent Landlord elects not to grant the entire Option Term TI Allowance to Tenant as a tenant improvement allowance, the offset under item (B), above, shall equal the amount of the tenant improvement allowance not granted to Tenant as a tenant improvement allowance pursuant to the preceding sentence.

4. **COMPARABLE BUILDINGS**. For purposes of this Lease, the term "Comparable Buildings" shall mean the Building and those certain other first-class life-science projects and spaces in Redwood City, California and the surrounding commercial area. With respect to Comparable Transactions that are not located in the Building, the Market Rent shall be adjusted, if necessary, to take into consideration the size, age, quality of construction and appearance of the Comparable Buildings as they the relate to the Building.

5. **METHODOLOGY FOR REVIEWING AND COMPARING THE COMPARABLE TRANSACTIONS**. In order to analyze the Comparable Transactions based on the factors to be considered in calculating Market Rent, and given that the Comparable Transactions may vary in terms of length or term, rental rate, concessions, etc., the following steps shall be taken into consideration to "adjust" the objective data from each of the Comparable Transactions. By taking this approach, a "Net Equivalent Lease Rate" for each of the Comparable Transactions shall be determined using the following steps to adjust the Comparable Transactions, which will allow for an "apples to apples" comparison of the Comparable Transactions.

5.1 The contractual rent payments for each of the Comparable Transactions should be arrayed monthly or annually over the lease term. All Comparable Transactions should be adjusted to simulate a net rent structure, wherein the tenant is responsible for the payment of all property operating expenses and taxes in a manner consistent with this Lease. This results in the estimate of Net Equivalent Rent received by each landlord for each Comparable Transaction being expressed as a periodic net rent payment.

5.2 Any free rent or similar inducements received over time should be deducted in the time period in which they occur, resulting in the net cash flow arrayed over the lease term.

5.3 The resultant net cash flow from the lease should be then discounted (using an annual discount rate equal to 8.0%) to the lease commencement date, resulting in a net present value estimate.

5.4 From the net present value, up front inducements (improvements allowances and other concessions) should be deducted. These items should be deducted directly, on a "dollar for dollar" basis, without discounting since they are typically incurred at lease commencement, while rent (which is discounted) is a future receipt.

5.5 The net present value should then amortized back over the lease term as a level monthly or annual net rent payment using the same annual discount rate of 8.0% used in the present value analysis. This calculation will result in a hypothetical level or even payment over the option period, termed the "Net Equivalent Lease Rate" (or constant equivalent in general financial terms).

6. **USE OF NET EQUIVALENT LEASE RATES FOR COMPARABLE TRANSACTIONS**. The Net Equivalent Lease Rates for the Comparable Transactions shall then be used to reconcile, in a manner usual and customary for a real estate appraisal process, to a conclusion of Market Rent which shall be stated as a Net Equivalent Lease Rate applicable to the Option Term.

EXHIBIT G

BRITANNIA SEAPORT CENTRE

ENVIRONMENTAL QUESTIONNAIRE

ENVIRONMENTAL QUESTIONNAIRE
FOR COMMERCIAL AND INDUSTRIAL PROPERTIES

Property Name: _____

Property Address: _____

Instructions: The following questionnaire is to be completed by the Lessee representative with knowledge of the planned operations for the specified building/location. Please print clearly and attach additional sheets as necessary.

1.0 PROCESS INFORMATION

Describe planned use, and include brief description of manufacturing processes employed.

_____

_____

_____

2.0 HAZARDOUS MATERIALS

Are hazardous materials used or stored? If so, continue with the next question. If not, go to Section 3.0.

2.1 Are any of the following materials handled on the Property? Yes ☐ No ☐

(A material is handled if it is used, generated, processed, produced, packaged, treated, stored, emitted, discharged, or disposed.) If so, complete this section. If this question is not applicable, skip this section and go on to Section 5.0.

☐ Explosives	☐ Fuels	☐ Oils
☐ Solvents	☐ Oxidizers	☐ Organics/Inorganics
☐ Acids	☐ Bases	☐ Pesticides
☐ Gases	☐ PCBs	☐ Radioactive Materials
☐ Other (please specify)		

2-2. If any of the groups of materials checked in Section 2.1, please list the specific material(s), use(s), and quantity of each chemical used or stored on the site in the Table below. If convenient, you may substitute a chemical inventory and list the uses of each of the chemicals in each category separately.

Material	Physical State (Solid, Liquid, or Gas)	Usage	Container Size	Number of Containers	Total Quantity

Material	Physical State (Solid, Liquid, or Gas)	Usage	Container Size	Number of Containers	Total Quantity

2-3. Describe the planned storage area location(s) for these materials. Please include site maps and drawings as appropriate.

3.0 HAZARDOUS WASTES

Are hazardous wastes generated?

Yes ☐ No ☐

If yes, continue with the next question. Ifnot, skip this section and go to section 4.0.

3.1 Are any of the following wastes generated, handled, or disposed of (where applicable) on the Property?

☐ Hazardous wastes ☐ Industrial Wastewater
☐ Waste oils ☐ PCBs
☐ Air emissions ☐ Sludges
☐ Regulated Wastes ☐ Other (please specify)

3-2. List and quantify the materials identified in Question 3-1 of this section.

WASTE GENERATED	RCRA listed Waste?	SOURCE	APPROXIMATE MONTHLY QUANTITY	WASTE CHARACTERIZATION	DISPOSITION

3-3. Please include name, location, and permit number (e.g. EPA ID No.) for transporter and disposal facility, if applicable). Attach separate pages as necessary.

Transporter/Disposal Facility Name	Facility Location	Transporter (T) or Disposal (D) Facility	Permit Number

3-4. Are pollution controls or monitoring employed in the process to prevent or minimize the release of wastes into the environment?

Yes ☐ No ☐

3-5. If so, please describe.

4.0 USTS/ASTS

4.1 Are underground storage tanks (USTs), aboveground storage tanks (ASTs), or associated pipelines used for the storage of petroleum products, chemicals, or liquid wastes present on site (lease renewals) or required for planned operations (new tenants)? Yes___ No___

If not, continue with section 5.0. If yes, please describe capacity, contents, age, type of the USTs or ASTs, as well any associated leak detection/spill prevention measures. Please attach additional pages if necessary.

Capacity	Contents	Year Installed	Type (Steel, Fiberglass, etc)	Associated Leak Detection / Spill Prevention Measures*

* Note: The following are examples of leak detection *I* spill prevention measures:
Integrity testing Inventory reconciliation Leak detection system
Overfill spill protection Secondary containment Cathodic protection

4-2. Please provide copies of written tank integrity test results and/or monitoring documentation, if available.

4-3. Are pollution controls or monitoring employed in the process to prevent or minimize the release of wastes into the environment? Yes ☐ No ☐

4-4. If this Questionnaire is being completed for a lease renewal, and if any of the USTs/ASTs have leaked, please state the substance released, the media(s) impacted (e.g., soil, water, asphalt, etc.), the actions taken, and all remedial responses to the incident.

4-5. If this Questionnaire is being completed for a lease renewal, have USTs/ASTs been removed from the Property? Yes ☐ No ☐

If yes, please provide any official closure letters or reports and supporting documentation (e.g., analytical test results, remediation report results, etc.).

4-6. For Lease renewals, are there any above or below ground pipelines on site used to transfer chemicals or wastes? Yes ☐ No ☐

For new tenants, are installations of this type required for the planned operations?

Yes ☐ No ☐

If yes to either question, please describe.

_____

_____

_____

5.0 ASBESTOS CONTAINING BUILDING MATERIALS

Please be advised that an asbestos survey may have been performed at the Property. If provided, please review the information that identifies the locations of known asbestos containing material or presumed asbestos containing material. All personnel and appropriate subcontractors should be notified of the presence of these materials, and informed not to disturb these materials. Any activity that involves the disturbance or removal of these materials must be done by an appropriately trained individual/contractor.

6.0 REGULATORY

6-1. Does the operation have or require a National PoJJutant Discharge Elimination System (NPDES) or equivalent permit? Yes ☐ No ☐

If so, please attach a copy of this permit.

6-2. Has a Hazardous Materials Business Plan been developed for the site? Yes ☐ No ☐

If so, please attach a copy.

CERTIFICATION

I am familiar with the real property described in this questionnaire. By signing below, I represent and warrant that the answers to the above questions are complete and accurate to the best of my knowledge. I also understand that Lessor will rely on the completeness and accuracy of my answers in assessing any environmental liability risks associated with the property.

Signature: _____

Name: _____

Title: _____

Date: _____

Telephone: _____

EXHIBIT H

BRITANNIA SEAPORT CENTRE

FORM OF LETTER OF CREDIT

(Letterhead of a money center bank acceptable to the Landlord)

FAX NO. [(_____) _____ _____]
SWIFT: [Insert No., if any]

[Insert Bank Name And Address]

DATE OF ISSUE:_____

BENEFICIARY:

[Insert Beneficiary Name And Address]

APPLICANT:

[Insert Applicant Name And Address]

LETTER OF CREDIT NO._____

EXPIRATION
_____AT OUR COUNTERS

DATE: AMOUNT AVAILABLE
USD[Insert Dollar Amount]
(U.S. DOLLARS [Insert Dollar Amount])

LADIES AND GENTLEMEN:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO._____IN YOUR FAVOR FOR THE ACCOUNT OF [Insert Tenant's Name], A [Insert Entity Type], UP TO THE AGGREGATE AMOUNT OF USD[Insert Dollar Amount] ([Insert Dollar Amount] U.S. DOLLARS) EFFECTIVE IMMEDIATELY AND EXPIRING ON_____(Expiration Date)_____AVAILABLE BY PAYMENT UPON PRESENTATION OF YOUR DRAFT AT SIGHT DRAWN ON [Insert Bank Name] WHEN ACCOMPANIED BY THE FOLLOWING DOCUMENT(S):

1. THE ORIGINAL OF THIS IRREVOCABLE STANDBY LETTER OF CREDIT AND AMENDMENT(S), IF ANY.

2. BENEFICIARY'S SIGNED STATEMENT PURPORTEDLY SIGNED BY AN AUTHORIZED REPRESENTATIVE OF [Insert Landlord's Name], A [Insert Entity Type) ("LANDLORD") STATING THE FOLLOWING:

> "THE UNDERSIGNED HEREBY CERTIFIES THAT THE LANDLORD, EITHER (A) UNDER THE LEASE (DEFINED BELOW), OR (B) AS A RESULT OF THE TERMINATION OF SUCH LEASE, HAS THE RIGHT TO DRAW DOWN THE AMOUNT OF USD ---- IN ACCORDANCE WITH THE TERMS OF THAT CERTAIN OFFICE LEASE DATED [Insert Lease Date], AS AMENDED (COLLECTIVELY, THE "LEASE"), OR SUCH AMOUNT CONSTITUTES DAMAGES OWING BY THE TENANT UNDER SUCH LEASE TO BENEFICIARY RESULTING FROM THE BREACH OF SUCH LEASE BY THE TENANT THEREUNDER, AND SUCH AMOUNT REMAINS UNPAID AT THE TIME OF THIS DRAWING."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT WE HAVE RECEIVED A WRITTEN NOTICE OF [Insert Bank Name]'S ELECTION NOT TO EXTEND ITS STANDBY LETTER OF CREDIT NO._____AND HAVE NOT RECEIVED A REPLACEMENT LETTER OF CREDIT WITHIN AT LEAST SIXTY(60) DAYS PRIOR TO THE PRESENT EXPIRATION DATE."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW DOWN THE FULL AMOUNT OF LETTER OF CREDIT NO._____AS THE RESULT OF THE FILING OF A VOLUNTARY PETITION UNDER THE U.S. BANKRUPTCY CODE OR A STATE BANKRUPTCY CODE BY THE TENANT UNDER THAT CERTAIN OFFICE LEASE DATED [Insert Lease Date], AS AMENDED (COLLECTIVELY, THE "LEASE"), WHICH FILING HAS NOT BEEN DISMISSED AT THE TIME OF THIS DRAWING."

OR

"THE UNDERSIGNED HEREBY CERTIFIES THAT BENEFICIARY IS ENTITLED TO DRAW DOWN THE FULL AMOUNT OF LETTER OF CREDIT NO. _____AS THE RESULT OF AN INVOLUNTARY PETITION HAVING BEEN FILED UNDER THE U.S. BANKRUPTCY CODE OR A STATE BANKRUPTCY CODE AGAINST THE TENANT UNDER THAT CERTAIN OFFICE LEASE DATED [Insert Lease Date], AS AMENDED (COLLECTIVELY, THE "LEASE"), WHICH FILING HAS NOT BEEN DISMISSED AT THE TIME OF THIS DRAWING."

SPECIAL CONDITIONS:

PARTIAL DRAWINGS AND MULTIPLE PRESENTATIONS MAY BE MADE UNDER THIS STANDBY LETTER OF CREDIT, PROVIDED, HOWEVER, THAT EACH SUCH DEMAND THAT IS PAID BY US SHALL REDUCE THE AMOUNT AVAILABLE UNDER THIS STANDBY LETTER OF CREDIT.

ALL INFORMATION REQUIRED WHETHER INDICATED BY BLANKS, BRACKETS OR OTHERWISE, MUST BE COMPLETED AT THE TIME OF DRAWING. [Please Provide The Required Forms For Review, And Attach As Schedules To The Letter Of Credit.]

ALL SIGNATURES MUST BE MANUALLY EXECUTED IN ORIGINALS.

ALL BANKING CHARGES ARE FOR THE APPLICANT'S ACCOUNT.

IT IS A CONDITION OF THIS STANDBY LETTER OF CREDIT THAT IT SHALL BE DEEMED AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR A PERIOD OF ONE YEAR FROM THE PRESENT OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST SIXTY (60) DAYS PRIOR TO THE EXPIRATION DATE WE SEND YOU NOTICE BY NATIONALLY RECOGNIZED OVERNIGHT COURIER SERVICE THAT WE ELECT NOT TO EXTEND THIS CREDIT FOR ANY SUCH ADDITIONAL PERIOD. SAID NOTICE WILL BE SENT TO THE ADDRESS INDICATED ABOVE, UNLESS A CHANGE OF ADDRESS IS OTHERWISE NOTIFIED BY YOU TO US IN WRITING BY RECEIPTED MAIL OR COURIER. ANY NOTICE TO US WILL BE DEEMED EFFECTIVE ONLY UPON ACTUAL RECEIPT BY US AT OUR DESIGNATED OFFICE. IN NO EVENT, AND WITHOUT FURTHER NOTICE FROM OURSELVES, SHALL THE EXPIRATION DATE BE EXTENDED BEYOND A FINAL EXPIRATION DATE OF ____(Expiration Date)____.

THIS LETTER OF CREDIT MAY BE TRANSFERRED SUCCESSIVELY IN WHOLE OR IN PART ONLY UP TO THE THEN AVAILABLE AMOUNT IN FAVOR OF A NOMINATED TRANSFEREE ("TRANSFEREE"), ASSUMING SUCH TRANSFER TO SUCH TRANSFEREE IS IN COMPLIANCE WITH ALL APPLICABLE

U.S. LAWS AND REGULATIONS. AT THE TIME OF TRANSFER, THE ORIGINAL LETTER OF CREDIT AND ORIGINAL AMENDMENT(S) IF ANY, MUST BE SURRENDERED TO US TOGETHER WITH OUR TRANSFER FORM (AVAILABLE UPON REQUEST) AND PAYMENT OF OUR CUSTOMARY TRANSFER FEES BY APPLICANT. IN CASE OF ANY TRANSFER UNDER THIS LETTER OF CREDIT, THE DRAFT AND ANY REQUIRED STATEMENT MUST BE EXECUTED BY THE TRANSFEREE AND WHERE THE BENEFICIARY'S NAME APPEARS WITHIN THIS STANDBY LETTER OF CREDIT, THE TRANSFEREE'S NAME IS AUTOMATICALLY SUBSTITUTED THEREFOR.

ALL DRAFTS REQUIRED UNDER THIS STANDBY LETTER OF CREDIT MUST BE MARKED: "DRAWN UNDER [Insert Bank Name] STANDBY LETTER OF CREDIT NO._____."

WE HEREBY AGREE WITH YOU THAT IF DRAFTS ARE PRESENTED TO [Insert Bank Name] UNDER THIS LETTER OF CREDIT AT OR PRIOR TO [Insert Time - *(e.g.*, 11:00 AM)], ON A BUSINESS DAY, AND PROVIDED THAT SUCH DRAFTS PRESENTED CONFORM TO THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT, PAYMENT SHALL BE INITIATED BY US IN IMMEDIATELY AVAILABLE FUNDS BY OUR CLOSE OF BUSINESS ON THE SUCCEEDING BUSINESS DAY. IF DRAFTS ARE PRESENTED TO [Insert Bank Name] UNDER THIS LETTER OF CREDIT AFTER [Insert Time - *(e.g.*, 11:00 AM)], ON A BUSINESS DAY, AND PROVIDED THAT SUCH DRAFTS CONFORM WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT, PAYMENT SHALL BE INITIATED BY US IN IMMEDIATELY AVAILABLE FUNDS BY OUR CLOSE OF BUSINESS ON THE SECOND SUCCEEDING BUSINESS DAY. AS USED IN THIS LETTER OF CREDIT, "BUSINESS DAY" SHALL MEAN ANY DAY OTHER THAN A SATURDAY, SUNDAY OR A DAY ON WHICH BANKING INSTITUTIONS IN THE STATE OF CALIFORNIA ARE AUTHORIZED OR REQUIRED BY LAW TO CLOSE. IF THE EXPIRATION DATE FOR THIS LETTER OF CREDIT SHALL EVER FALL ON A DAY WHICH IS NOT A BUSINESS DAY THEN SUCH EXPIRATION DATE SHALL AUTOMATICALLY BE EXTENDED TO THE DATE WHICH IS THE NEXT BUSINESS DAY.

PRESENTATION OF A DRAWING UNDER THIS LETTER OF CREDIT MAY BE MADE ON OR PRIOR TO THE THEN CURRENT EXPIRATION DATE HEREOF BY HAND DELIVERY, COURIER SERVICE, OVERNIGHT MAIL, OR FACSIMILE. PRESENTATION BY FACSIMILE TRANSMISSION SHALL BE BY TRANSMISSION OF THE ABOVE REQUIRED SIGHT DRAFT DRAWN ON US TOGETHER WITH THIS LETTER OF CREDIT TO OUR FACSIMILE NUMBER, [Insert Fax Number - (____)___-_____], ATTENTION: [Insert Appropriate Recipient], WITH TELEPHONIC CONFIRMATION OF OUR RECEIPT OF SUCH FACSIMILE TRANSMISSION AT OUR TELEPHONE NUMBER [Insert Telephone Number - (____) ___-_____]OR TO SUCH OTHER FACSIMILE OR TELEPHONE NUMBERS, AS TO WHICH YOU HAVE RECEIVED WRITTEN NOTICE FROM US AS BEING THE APPLICABLE SUCH NUMBER. WE AGREE TO NOTIFY YOU IN WRITING, BY NATIONALLY RECOGNIZED OVERNIGHT COURIER SERVICE, OF ANY CHANGE IN SUCH DIRECTION. ANY FACSIMILE PRESENTATION PURSUANT TO THIS PARAGRAPH SHALL ALSO STATE THEREON THAT THE ORIGINAL OF SUCH SIGHT DRAFT AND LETTER OF CREDIT ARE BEING REMITTED, FOR DELIVERY ON THE NEXT BUSINESS DAY, TO [Insert Bank Name] AT THE APPLICABLE ADDRESS FOR PRESENTMENT PURSUANT TO THE PARAGRAPH FOLLOWING THIS ONE.

WE HEREBY ENGAGE WITH YOU THAT ALL DOCUMENT(S) DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS STAND BY LETTER OF CREDIT WILL BE DULY HONORED IF DRAWN AND PRESENTED FOR PAYMENT AT OUR OFFICE LOCATED AT [Insert Bank Name], [Insert Bank Address], ATTN: [Insert Appropriate Recipient], ON OR BEFORE THE EXPIRATION DATE OF THIS CREDIT, ____(Expiration Date)____.

IN THE EVENT THAT THE ORIGINAL OF THIS STANDBY LETTER OF CREDIT IS LOST, STOLEN, MUTILATED, OR OTHERWISE DESTROYED, WE HEREBY AGREE TO ISSUE A DUPLICATE ORIGINAL HEREOF UPON RECEIPT OF A WRITTEN REQUEST FROM YOU AND A CERTIFICATION BY YOU (PURPORTEDLY SIGNED BY YOUR AUTHORIZED REPRESENTATIVE) OF THE LOSS, THEFT, MUTILATION, OR OTHER DESTRUCTION OF THE ORIGINAL HEREOF.

EXCEPT SO FAR AS OTHERWISE EXPRESSLY STATED HEREIN, THIS STANDBY LETTER OF CREDIT IS SUBJECT TO THE "INTERNATIONAL STANDBY PRACTICES" (ISP98) INTERNATIONAL CHAMBER OF COMMERCE (PUBLICATION NO. 590).

Very truly yours,

(Name of Issuing Bank)

By: _____

EXHIBIT I

BRITANNIA SEAPORT CENTRE

EXISTING PERSONAL PROPERTY

Landlord's Property;

Soft-wall clean room expansion (including all casework)

All existing fume hoods

Compressors located anywhere m the Premises, and any associated hoods

Built-in projector screens

Server room cabling and trays

Security Cage

Access control system (including card reader and related monitoring system)

and the following items (as more particularly discussed in Exhibit J):

Asset ID #	Description
251	Beach-Tek Security Cage
226	Projector Lab Hood
323	Atlas Copco Compressor SF11FFM-145
228	Clean Room Expansion
38	Servicer ULTR Cleanroom

EXHIBIT J

BRITANNIA SEAPORT CENTRE

TENANT PERSONAL PROPERTY

Tenant's Propertv:

All items listed in "Exhibit A-3: Tangible Assets" attached to the Foreclosure Sale Agreement dated March 31, 2009 among Tenant, Prior Tenant, Venture Lending & Leasing IV, Inc. and Venture Lending & Leasing V, Inc. (specifically including, but not limited to, the two Panasonic projector systems listed as Asset ID Nos. 434 and 433 on such Exhibit A-3), except that the following specific items, although listed with the indicated Asset ID Nos. on such Exhibit A-3, are not Tenant's Property and instead are part of Landlord's Property:

Asset ID #	Description
251	Beach-Tek Security Cage
226	Projector Lab Hood
323	Atlas Copco Compressor SF11FFM-145
228	Clean Room Expansion
38	Servicer ULTR Cleanroom

FIRST AMENDMENT TO OFFICE LEASE

This FIRST AMENDMENT TO OFFICE LEASE ("**First Amendment**") is made and entered into as of the 3rd day of October, 2014, by and between **HCP LS REDWOOD CITY, LLC**, a Delaware limited partnership ("**Landlord**"), and **PULMONX CORPORATION**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord and Tenant (as the successor-in-interest to Pulmonx, Inc., a California corporation) entered into that certain Office Lease dated September 4, 2009 (the "**Office Lease**"), whereby Landlord leases to Tenant and Tenant leases from Landlord 24,591 rentable square feet of space (the "**Premises**") consisting of all of the rentable area of the building (the "**Building**") located at 700 Chesapeake Drive, Redwood City, California 94063.

B. The parties desire to amend the Lease on the terms and conditions set forth in this First Amendment.

AGREEMENT:

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. **Terms**. All capitalized terms when used herein shall have the same respective meanings as are given such terms in the Lease unless expressly provided otherwise in this First Amendment.

2. **Condition of the Premises**. Landlord and Tenant acknowledge that Tenant has been occupying the Premises pursuant to the Lease, and therefore Tenant continues to accept the Premises in its presently existing, "as is" condition. Except as expressly set forth in the Work Letter attached hereto as **Exhibit A** (the "**Work Letter**"), Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises.

3. **Extended Lease Term**. Pursuant to the Lease, and notwithstanding that Section 3.3 of the Summary attached to the Lease incorrectly identified the Lease Expiration Date as June 30, 2015, the Lease Tenn is scheduled to expire on July 31, 2015. Landlord and Tenant hereby agree to extend the Lease Term for a period of five (5) years, from August 1, 2015, until July 31, 2020, on the terms and conditions set forth in the Lease, as hereby amended by this First Amendment, unless sooner terminated as provided in the Lease. The period of time commencing on August 1, 2015, and ending on July 31, 2020, shall be referred to herein as the "**Extended Term**."

3.1 **Option to Extend Lease Term**. Landlord and Tenant acknowledge and agree that Tenant shall continue to have one (1) option to extend the Lease Term for a period of five (5) years in accordance with, and pursuant to the terms of, Section 2.2 of the Office Lease.

4. **Rent**.

4.1 **Base Rent**. Prior to August 1, 2015, Tenant shall continue to pay monthly installments of Base Rent for the Premises in accordance with the terms of the Lease. During the Extended Tenn, Tenant shall pay monthly installments of Base Rent for the Premises as follows:

Period During Extended Term	Annual Base Rent	Monthly Installment of Base Rent	Monthly Rental Rate per Square Foot
August 1, 2015 - July 31, 2016*	$737,730.00*	$61,477.50*	$2.50
August 1, 2016 - July 31, 2017	$759,861.90	$63,321.83	$2.58
August 1, 2017 - July 31, 2018	$782,657.76	$65,221.48	$2.65
August 1, 2018 - July 31, 2019	$806,137.49	$67,178.12	$2.73
August 1, 2019- July 31, 2020	$830,321.61	$69,193.47	$2.81

*Note: Tenant shall have no obligation to pay any Base Rent for the Premises attributable to the two (2) month period commencing on August 1, 2015 and ending on September 30, 2015; provided, however, Tenant shall be required to pay Tenant's Share of Direct Expenses attributable to such period, as well as for all utilities and other services.

4.2 **Direct Expenses**. Prior to and during the Extended Term, Tenant shall continue to be obligated to pay Tenant's Share of the annual Building Direct Expenses in connection with the Premises in accordance with the terms of the Lease.

5. **Brokers**. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this First Amendment other than CBRE, Inc. and Cassidy Turley(the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this First Amendment. Landlord shall pay the Brokers pursuant to the terms of separate commission agreements. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party. The terms of this Section 5 shall survive the expiration or earlier termination of the term of the Lease, as hereby amended.

6. **California Accessibility Disclosure**. For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges that the Common Areas and the Premises have not undergone inspection by a Certified Access Specialist (CASp).

7. **No Further Modification**. Except as specifically set forth in this First Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, this First Amendment has been executed as of the day and year first above written.

LANDLORD:

HCP LS REDWOOD CITY, LLC,
a Delaware limited liability company

By: HCP Estates USA Inc.,
a Delaware corporation
its Manager

By: /s/ Jonathan Bergschneider
Jonathan Bergschneider
Executive Vice President

TENANT:

PULMONX CORPORTION
a Delaware corporation

By: /s/ Trish Howell
Trish Howell
Print Name
Its: VP, Operations

By: /s/ Lauren Cristina
Lauren Cristina
Print Name
Its: VP, Finance and Admin

EXHIBIT A

WORK LETTER

Landlord and Tenant acknowledge that Tenant has been occupying the Premises pursuant to the Lease. Except as specifically set forth herein, Landlord shall not be obligated to construct or install any improvements or facilities of any kind in the Premises, and Tenant shall continue to accept the Premises in its currently-existing, "as-is" condition. Notwithstanding the foregoing, Tenant shall be entitled to a one-time tenant improvement allowance (the "**Tenant Improvement Allowance**") equal to One Hundred Twenty-Two Thousand Nine Hundred Fifty• Five and 00/100 Dollars ($122,955.00) *(i.e.,* $5.00 per rentable square foot of the Premises) for the costs relating to the design and construction of Tenant's improvements which are permanently affixed to the Premises (the "**Tenant Improvements**"). In no event shall any of the Tenant Improvement Allowance be used for any soft costs, including but not limited to (a) Tenant's furniture, fixtures, equipment, signage or other items of personal property, (b) installation of telephone or data cabling, or (c) moving or relocation expenses. The Tenant Improvement Allowance will be disbursed in accordance with Landlord's standard disbursement procedures, including, without limitation, following Landlord's receipt of (i) evidence (i.e., invoices or other documentation reasonably satisfactory to Landlord) of payment for the Tenant Improvements, and (ii) fully executed, unconditional lien releases from all contractors, subcontractors, laborers, materialmen, and suppliers used by Tenant in connection with the Tenant Improvements. The Tenant Improvements shall be constructed in accordance with the terms and conditions of Article 8 of the Lease. In no event shall Landlord be obligated to disburse any portion of the Tenant Improvement Allowance prior to January 1, 2015 or subsequent to January 1, 2017, nor shall Landlord be obligated to disburse any amount in excess of the Tenant Improvement Allowance in connection with the construction of the Tenant Improvements. No portion of the Tenant Improvement Allowance, if any, remaining after the construction of the Tenant Improvements shall be available for use by Tenant.

SECOND AMENDMENT TO OFFICE LEASE

This SECOND AMENDMENT TO OFFICE LEASE ("**Second Amendment**") is made and entered into as of the 7th day of November, 2019, by and between **HCP LS REDWOOD CITY, LLC,** a Delaware limited partnership ("**Landlord**"), and **PULMONX CORPORATION,** a Delaware corporation ("**Tenant**").

R E C I T A L S :

A. Landlord and Tenant (as the successor-in-interest to Pulmonx, Inc., a California corporation) entered into that certain Office Lease dated September 4, 2009 (the "**Original Lease**"), as amended by that certain First Amendment to Office Lease dated September 30, 2014 (the "**First Amendment**" and together with the Original Lease, the "**Lease**"), whereby Landlord leases to Tenant and Tenant leases from Landlord 24,591 rentable square feet of space (the "**Premises**") consisting of all of the rentable area of the building (the "**Building**") located at 700 Chesapeake Drive, Redwood City, California 94063.

B. The parties desire to amend the Lease on the terms and conditions set forth in this Second Amendment.

A G R E E M E N T :

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. Terms. All capitalized terms when used herein shall have the same respective meanings as are given such terms in the Lease unless expressly provided otherwise in this Second Amendment.

2. Condition of the Premises. Landlord and Tenant acknowledge that Tenant has been occupying the Premises pursuant to the Lease, and therefore Tenant continues to accept the Premises in its presently existing, "as is" condition. Except as expressly set forth in the Work Letter attached hereto as **Exhibit A** (the "**Work Letter**"), Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises.

3. Lease Term.

3.1 Second Extended Lease Term. Pursuant to the Lease, the Lease Term is scheduled to expire on July 31, 2020. Landlord and Tenant hereby agree to extend the Lease Term for a period of five (5) years, from August 1, 2020, until July 31, 2025, on the terms and conditions set forth in the Lease, as hereby amended by this Second Amendment, unless sooner terminated as provided in the Lease. The period of time commencing on August 1, 2020, and ending on July 31, 2025, shall be referred to herein as the "**Second Extended Term**."

3.2 No Further Right to Extend Lease Term. Landlord and Tenant acknowledge and agree that the Second Extended Term provided herein shall be deemed to represent

Tenant's option to extend the Lease Term as provided in Section 2.2 of the Original Lease, and therefore, effective as of the date of this Second Amendment, Section 2.2 of the Original Lease shall be terminated and of no further force or effect.

4. Rent.

4.1 Base Rent. Prior to August 1, 2020, Tenant shall continue to pay monthly installments of Base Rent for the Premises in accordance with the terms of the Lease. During the Second Extended Term, Tenant shall pay monthly installments of Base Rent for the Premises as follows, but otherwise in accordance with the terms of the Lease:

Period During Second Extended Term	Annual Base Rent	Monthly Installment of Base Rent	Monthly Rental Rate per Square Foot
August 1, 2020 – July 31, 2021	$1,504,969.20	$125,414.10	$5.10
August 1, 2021 – July 31, 2022	$1,557,643.12	$129,803.59	$5.28
August 1, 2022 – July 31, 2023	$1,612,160.63	$134,346.72	$5.46
August 1, 2023 – July 31, 2024	$1,668,586.25	$139,048.85	$5.65
August 1, 2024 – July 31, 2025	$1,726,986.77	$143,915.56	$5.85

* For the avoidance of doubt, the column "Monthly Installment of Base Rent" shall be binding upon the parties hereto should any inconsistencies exist in the rent schedule.

4.2 Direct Expenses. Prior to and during the Second Extended Term, Tenant shall continue to be obligated to pay Tenant's Share of the annual Direct Expenses in connection with the Premises in accordance with the terms of the Lease.

5. Security Deposit. Notwithstanding anything in the Lease to the contrary, the Security Deposit held by Landlord pursuant to the Lease, as amended hereby, shall equal $287,831.12. Landlord and Tenant acknowledge that, in accordance with Article 21 of the Original Lease, Tenant has previously delivered the sum of $57,297.03 (the "**Existing Security Deposit**") to Landlord as security for the faithful performance by Tenant of the terms, covenants and conditions of the Lease. Concurrently with Tenant's execution of this Second Amendment, Tenant shall deposit with Landlord an amount equal to $230,534.09 in cash to be held by Landlord as a part of the Security Deposit, or Tenant may deliver such amount (i.e., $230,534.09) as a letter of credit pursuant to the terms of Section 21.2 of the Original Lease. To the extent that the total amount held by Landlord at any time as security for the Lease, as hereby amended, is less than $287,831.12, Tenant shall pay the difference to Landlord within ten (10) business days following Tenant's receipt of notice thereof from Landlord.

6. **Notices**. Section 10 of the Summary (Address of Tenant) is hereby deleted and replaced in its entirety as follows:

Pulmonx
700 Chesapeake Drive
Redwood City, CA 94063
Attn: Derrick Sung, Ph.D

With a copy to:

Cooley, LLP
4401 Eastgate Mall
San Diego, CA 92121-1909
Attn: Connor McNellis

7. **Brokers**. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Second Amendment other than CBRE, Inc. and T3 Advisors (the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Second Amendment. Landlord shall pay the Brokers pursuant to the terms of separate commission agreements. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party. The terms of this Section 7 shall survive the expiration or earlier termination of the term of the Lease, as hereby amended.

8. **California Accessibility Disclosure**. For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges that the Common Areas and the Premises have not undergone inspection by a Certified Access Specialist (CASp). As required by Section 1938(e) of the California Civil Code, Landlord hereby states as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises." In furtherance of the foregoing, Landlord and Tenant hereby agree as follows: (a) any CASp inspection requested by Tenant shall be conducted, at Tenant's sole cost and expense, by a CASp approved in advance by Landlord; and (b) pursuant to Article 24 of the Original Lease, Tenant, at its cost, is responsible for making any repairs within the Premises to correct violations of construction-related accessibility standards; and, if anything done by or for Tenant in its use or occupancy of the Premises shall require repairs to the Building (outside the

Premises) to correct violations of construction-related accessibility standards, then Tenant shall, at Landlord's option, either perform such repairs at Tenant's sole cost and expense or reimburse Landlord upon demand, as Additional Rent, for the cost to Landlord of performing such repairs.

9. **Counterparts; Electronic Signatures**. This Second Amendment may be executed in any number of counterparts, each of which shall be deemed an original, but all of which when taken together shall constitute one and the same instrument. The signature page of any counterpart may be detached therefrom without impairing the legal effect of the signature(s) thereon provided such signature page is attached to any other counterpart identical thereto except having additional signature pages executed by other parties to this Second Amendment attached thereto. A facsimile or portable document format (PDF) signature on this Assignment shall be equivalent to, and have the same force and effect as, an original signature.

10. **No Further Modification**. Except as set forth in this Second Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect. In the event of any conflict between the provisions of this Second Amendment and the provisions of the Lease the provisions of this Second Amendment shall prevail. Whether or not specifically amended by this Second Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Second Amendment.

[signatures contained on following page]

IN WITNESS WHEREOF, this Second Amendment has been executed as of the day and year first above written.

LANDLORD:

HCP LS REDWOOD CITY, LLC,
a Delaware limited liability company

By: HCP Estates USA Inc.,
a Delaware corporation,
its Manager

By: /s/ Scott Bohn

Name: Scott Bohn

Its: Senior Vice President

TENANT:

PULMONX CORPORATION,
a Delaware corporation

By: /s/ Glen French

Glen French
Print Name

Its: President and CEO

By: _____
Print Name

Its: _____

EXHIBIT A

WORK LETTER

Landlord and Tenant acknowledge that Tenant has been occupying the Premises pursuant to the Lease. Except as specifically set forth herein, Landlord shall not be obligated to construct or install any improvements or facilities of any kind in the Premises, and Tenant shall continue to accept the Premises in its currently-existing, "as-is" condition. Notwithstanding the foregoing, Tenant shall be entitled to a one-time tenant improvement allowance (the "**Tenant Improvement Allowance**") equal to $245,910.00 (*i.e.*, $10.00 per rentable square foot of the Premises) for the costs relating to the design and construction of Tenant's improvements which are permanently affixed to the Premises (the "**Tenant Improvements**"). Landlord shall retain Project Management Advisors, Inc. ("**PMA**") as a third party project manager for construction oversight of the Tenant Improvements on behalf of Landlord, and Tenant shall pay a fee to Landlord with respect to the PMA services equal to three percent (3%) of the Tenant Improvement Allowance. In no event shall any of the Tenant Improvement Allowance be used for any soft costs, including but not limited to (a) Tenant's furniture, fixtures, equipment, signage or other items of personal property, (b) installation of telephone or data cabling, or (c) moving or relocation expenses. The Tenant Improvement Allowance will be disbursed in accordance with Landlord's standard disbursement procedures, including, without limitation, following Landlord's receipt of (i) evidence (i.e., invoices or other documentation reasonably satisfactory to Landlord) of payment for the Tenant Improvements, and (ii) fully executed, unconditional lien releases from all contractors, subcontractors, laborers, materialmen, and suppliers used by Tenant in connection with the Tenant Improvements. The Tenant Improvements shall be constructed in accordance with the terms and conditions of Article 8 of the Original Lease, except for Section 8.3 (Payment for Improvements). In no event shall Landlord be obligated to disburse any portion of the Tenant Improvement Allowance subsequent to August 1, 2021, nor shall Landlord be obligated to disburse any amount in excess of the Tenant Improvement Allowance in connection with the construction of the Tenant Improvements. No portion of the Tenant Improvement Allowance, if any, remaining after the construction of the Tenant Improvements shall be available for use by Tenant.

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT (this "**Agreement**") dated as of February 20, 2020 (the "**Closing Date**") is entered into among CANADIAN IMPERIAL BANK OF COMMERCE ("**Lender**"), PULMONX CORPORATION, a Delaware corporation ("**Pulmonx**"), each other Person party hereto as a borrower from time to time (together with Pulmonx, collectively, "**Borrowers**", and each, a "**Borrower**") and each Person party hereto as a Guarantor (as defined below) from time to time.

AGREEMENT

Borrower Representative, each other Borrower from time to time party hereto, each Guarantor from time to time party hereto and Lender hereby agree as follows:

1. ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed in accordance with GAAP, and calculations and determinations shall be made following GAAP, consistently applied. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth on Exhibit A. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to the preamble or a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the preamble or the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. For purposes of the Loan Documents, whenever a representation or warranty is made to a Person's knowledge or awareness, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer of such Person. References to Persons include their respective successors and assigns (to the extent and only to the extent permitted by the Loan Documents) or, in the case of Governmental Authorities, Persons succeeding to the relevant functions of such Persons. All references in this Agreement or any other Loan Document to (a) statutes shall include all amendments of same and implementing regulations and any successor statutes and regulations and (b) any instrument or agreement (including any of the Loan Documents) shall include any and all modifications and supplements thereto and any and all restatements, extensions or renewals thereof to the extent such modifications, supplements, restatements, extensions or renewals of any such documents are permitted by the terms hereof and thereof. Unless otherwise specifically indicated, definitions of agreements and instruments in Exhibit A mean and refer to such agreements and instruments as amended, modified, supplemented, restated, substituted or replaced from time to time in accordance with their respective terms and the terms of this Agreement and the other Loan Documents. A Default or an Event of Default shall be deemed to exist at all times during the period commencing on the date that such Default or Event of Default occurs to the date on which such Default or Event of Default is waived in writing pursuant to this Agreement or, with respect to any Default, is cured within any period of cure expressly provided in this Agreement. Whenever in any provision of this Agreement or any other Loan Document Lender is authorized to take or decline to take any action (including making any determination) in the exercise of its "discretion," such provision shall be understood to mean that Lender may take or refrain to take such action in its sole and absolute discretion.

2. LOANS AND TERMS OF PAYMENT

2.1 Promise to Pay. Each Borrower hereby unconditionally promises to pay Lender the outstanding principal amount of all Credit Extensions, accrued and unpaid interest, fees and charges thereon and all other amounts owing hereunder as and when due in accordance with this Agreement.

2.2 [Intentionally Omitted].

2.3 Term Loans.

(a) Availability.

(i) Subject to the terms and conditions of this Agreement, Lender agrees to make to Borrowers on the Closing Date a term loan (the "**Term A Loan**") in an aggregate principal amount equal to the Term A Loan Amount. When repaid, in whole or in part, the Term A Loan may not be re-borrowed. Lender's obligation to lend under this Section 2.3(a)(i) shall terminate upon the making of the Term A Loan as provided above.

(ii) Subject to the terms and conditions of this Agreement, Lender agrees to make to Borrowers one or more additional term loans (each, a "**Term B Loan**" and collectively, the "**Term B Loans**") in an aggregate amount of up to the Term B Loan Amount, at the request of Borrowers, on or before February 20, 2022, so long as (X) no Event of Default has occurred on or prior to the date of any such borrowing, (Y) the Swiss Security Conditions have been satisfied and (Z) the minimum amount of each Term B Loan shall be $1,000,000. When repaid, in whole or in part, the Term B Loans may not be re-borrowed. Lender's obligation to lend under this Section 2.3(a)(ii) shall terminate upon (A) the making an aggregate amount of Term B Loans equal to the Term B Loan Amount or (B) the occurrence of any Event of Default.

(iii) Subject to the terms and conditions of this Agreement, Lender agrees to make to Borrowers one or more additional term loans (each, a "**Term C Loan**" and collectively, the "**Term C Loans**"; together with the Term A Loan and the Term B Loans, each a "**Term Loan**" and collectively, the "**Term Loans**") in an aggregate amount of up to the Term C Loan Amount, at the request of Borrowers, on or before February 20, 2022, so long as (W) no Event of Default has occurred on or prior to the date of any such borrowing, (X) the minimum amount of each Term C Loan shall be $1,000,000, (Y) Borrowers shall have achieved $20,000,000 of Revenue for the trailing six month period as of the end of the month immediately preceding the proposed funding date of such Term C Loan and (Z) the Swiss Security Conditions have been satisfied. When repaid, in whole or in part, the Term C Loans may not be re-borrowed. Lender's obligation to lend under this Section 2.3(a)(iii) shall terminate upon (A) the making an aggregate amount of Term C Loans equal to the Term C Loan Amount or (B) the occurrence of any Event of Default.

(b) Repayment. Commencing on the Amortization Date, and continuing thereafter on the last Business Day of each successive month through the Term Loan Maturity Date, Borrowers shall make consecutive monthly payments of equal principal, based on the Amortization Schedule, plus accrued and unpaid interest. Any and all unpaid Obligations, including principal, any accrued and unpaid interest in respect of the Term Loans and other fees and other sums due hereunder, if any, shall be due and payable in full on the Term Loan Maturity Date. The Term Loans may only be prepaid in accordance with Section 2.3(c).

(c) Permitted Prepayment of the Term Loans. Borrowers shall have the option to prepay all, or any part of the Term Loans, provided Borrowers provide written notice to Lender of their election to prepay the Term Loans at least ten days prior to such prepayment, and pay, on the date of such prepayment:

(i) all outstanding principal being prepaid plus any accrued and unpaid interest; plus

(ii) all other sums, if any, that shall have become due and payable, including interest at the Default Rate with respect to any past due amounts;

and provided further that Borrowers prepay (if prepaying only a part of Term Loans) such part of the Term Loans in increments that are equal to $5,000,000. Any partial prepayment shall be applied first pro-rata to all outstanding amounts under the Term A Loan and the Term B Loans, and after the Term A Loan and Term B Loans have been paid in full, then pro-rata to all outstanding amounts under the Term C Loans.

2.4 Payment of Interest on the Credit Extensions.

(a) Interest Rate. Subject to Section 2.4(b), (i) the outstanding principal amount of the Term A Loan and the Term B Loans shall accrue interest at a floating per annum rate equal to 1.00 percentage point above the Prime Rate, and (ii) the outstanding principal amount of the Term C Loans shall accrue interest at a floating per annum

rate equal to 1.50 percentage points above the Prime Rate. All such interest shall be payable monthly in accordance with Section 2.4(d).

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, the Obligations shall bear interest at a rate per annum of 12.00% (the "**Default Rate**"), unless Lender otherwise elects from time to time in its sole discretion to impose a lesser interest rate. Fees and expenses which are required to be paid by Loan Parties pursuant to the Loan Documents (including Lender Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.4(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Lender.

(c) Adjustment to Interest Rate. Changes to the interest rate of any Credit Extension based on changes to the Prime Rate shall be effective on the effective date of any change to the Prime Rate and to the extent of any such change.

(d) Payment; Interest Computation. Interest is payable monthly in arrears on the last Business Day of each month and shall be computed on the basis of a 365- or 366-day year, as applicable, for the actual number of days elapsed. In computing interest, (i) all payments received after 12:00 p.m. Eastern time on any day shall be deemed received at the opening of business on the next Business Day, and (ii) the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

(e) Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (the "**Maximum Rate**"). If a court of competent jurisdiction shall finally determine that a Borrower has actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrowers shall be applied as follows: first, to the payment of principal outstanding in respect of the Credit Extensions; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Obligations; and third, after all Obligations are repaid, the excess (if any) shall be refunded to Borrowers.

2.5 Fees and Charges. Borrowers shall pay to Lender:

(a) Lender Expenses. All Lender Expenses (including reasonable and invoiced attorneys' fees and expenses for documentation and negotiation of this Agreement and the other Loan Documents) incurred through and after the Closing Date, when due (or, if no stated due date, within two Business Days after demand by Lender).

(b) Fees Fully Earned. In no event shall any Borrower be entitled to any credit, rebate, refund, reduction, proration or repayment of any fees or charges earned by Lender pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Lender's obligation to make loans and advances hereunder and notwithstanding the required payment date for such fees or charges.

2.6 Payments; Application of Payments.

(a) All payments to be made by Loan Parties under any Loan Document, including payments of principal and interest, all fees, charges, expenses, indemnities and reimbursements or of amounts payable under Section 2.7 or otherwise, shall be made in immediately available funds in Dollars, without setoff, recoupment or counterclaim, before 12:00 p.m. Eastern time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid. Unless otherwise directed by Lender or as set forth in the following proviso, Borrowers shall make all payments due to Lender at Lender's address specified in Section 10, except that payments pursuant to Section 2.7 shall be made directly to the Persons entitled thereto; provided, however, that Lender shall have the right to effectuate payment of any and all Obligations due and owing hereunder

or under any other Loan Document by charging any Deposit Account of any Loan Party with Lender or an Affiliate of Lender.

(b) No Loan Party shall have a right to specify the order or the loan accounts to which Lender shall allocate or apply any payments made by a Loan Party to Lender or otherwise received by Lender under this Agreement when any such allocation or application is not expressly specified elsewhere in this Agreement.

2.7 Withholding of Taxes; Gross-Up.

(a) Payments Free of Taxes. Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable withholding agent) requires the deduction or withholding of any Tax from any such payment by a withholding agent, then the applicable withholding agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by the applicable Loan Party shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.7), the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(b) Payment of Other Taxes by Loan Parties. The Loan Parties shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the applicable Recipient, timely reimburse it for, Other Taxes.

(c) Evidence of Payment. As soon as practicable after any payment of Taxes by any Loan Party to a Governmental Authority pursuant to this Section 2.7, such Loan Party shall deliver to the applicable Recipient the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment, or other evidence of such payment reasonably satisfactory to such Recipient.

(d) Indemnification by the Loan Parties. The Loan Parties shall jointly and severally indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 2.7) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Loan Party by the applicable Recipient shall be conclusive absent manifest error.

(e) Status of Lenders.

(i) Any Recipient that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower Representative, at the time or times reasonably requested by Borrower Representative, such properly completed and executed documentation reasonably requested by Borrower Representative as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Recipient, if reasonably requested by Borrower Representative, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower Representative as will enable Borrower Representative to determine whether or not such Recipient is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Sections 2.7(e)(ii)(A), 2.7(e)(ii)(B) and 2.7(e)(ii)(D)) shall not be required if in such Recipient's reasonable judgment such completion, execution or submission would subject such Recipient to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Recipient.

(ii) Without limiting the generality of the foregoing,

(A) any Recipient that is a U.S. Person shall deliver to Borrower Representative on or prior to the date on which such Recipient becomes a Recipient under this Agreement (and from

time to time thereafter upon the reasonable request of Borrower Representative), an executed copy of IRS Form W-9 certifying that such Recipient is exempt from U.S. federal backup withholding tax;

(B) any Recipient that is not a U.S. Person shall, to the extent it is legally entitled to do so, deliver to Borrower Representative (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Recipient becomes a Recipient under this Agreement (and from time to time thereafter upon the reasonable request of Borrower Representative), whichever of the following is applicable:

(1) in the case of a Foreign Recipient claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, an executed copy of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form), establishing an exemption from, or reduction of, United States federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form), establishing an exemption from, or reduction of, United States federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) in the case of a Foreign Recipient claiming that its extension of credit will generate United States effectively connected income, an executed copy of IRS Form W-8ECI (or successor form);

(3) in the case of a Foreign Recipient claiming the benefits of the exemption for portfolio interest under Section 881(c) of the IRC, (x) a certificate substantially in the form of Exhibit F-1 to the effect that such Foreign Recipient is not a "bank" within the meaning of Section 881(c)(3)(A) of the IRC, a "10 percent shareholder" of Borrower Representative within the meaning of Section 881(c)(3)(B) of the IRC, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the IRC (a "**U.S. Tax Compliance Certificate**") and (y) an executed copy of IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form); or

(4) to the extent a Foreign Recipient is not the beneficial owner, an executed copy of IRS Form W-8IMY (or successor form), accompanied by IRS Form W-8ECI, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable (or successor form), a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-2 or Exhibit F-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Recipient is a partnership and one or more direct or indirect partners of such Foreign Recipient are claiming the portfolio interest exemption, such Foreign Recipient may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-4 on behalf of each such direct and indirect partner;

(C) any Foreign Recipient shall, to the extent it is legally entitled to do so, deliver to Borrower Representative (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Recipient becomes a Recipient under this Agreement (and from time to time thereafter upon the reasonable request of Borrower Representative), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in United States federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit Borrower Representative to determine the withholding or deduction required to be made; and

(D) if a payment made to a Recipient under any Loan Document would be subject to United States federal withholding Tax imposed by FATCA if such Recipient were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the IRC, as applicable), such Recipient shall deliver to Borrower Representative at the time or times prescribed by law and at such time or times reasonably requested by Borrower Representative such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the IRC) and such additional documentation reasonably requested by Borrower Representative as may be necessary for Borrower Representative to comply with their obligations under FATCA and to determine that such Recipient has complied with such Recipient's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(E) Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower Representative in writing of its legal inability to do so.

(f) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.7 (including by the payment of additional amounts pursuant to this Section 2.7), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section 2.7 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (f) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 2.7(f), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 2.7(f) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts giving rise to such refund had never been paid. This paragraph (f) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(g) Register. Lender, acting for this purpose as a non-fiduciary agent of Borrowers, shall maintain at one of its offices a copy of any assignment and assumption delivered to it and a register for the recordation of the names and addresses of Lender, and principal amounts (and stated interest) of the Credit Extensions owing to, Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower and Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary.

(h) Survival. Notwithstanding anything to the contrary in this Agreement, each party's agreements and obligations contained in this Section 2.7 shall survive the termination of this Agreement, any assignment of rights by, or the replacement of, a Recipient, the termination of the Credit Extensions and the repayment, satisfaction or discharge of all obligations under any Loan Document.

(i) Defined Terms. For purposes of this Section 2.7, the term "applicable law" includes FATCA.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Lender's obligation to make the Term A Loan is subject to the condition precedent that Lender shall have received, in form and substance satisfactory to Lender, such documents, and completion of such other matters, as Lender may reasonably deem necessary or appropriate, including:

(a) duly-executed signatures to the Loan Agreement;

(b) duly-executed signatures to the IP Security Agreement;

(c) duly-executed signatures to the Account Control Agreement required under Section 6.6(b);

(d) a certificate of each Loan Party, duly executed by a Responsible Officer of such Loan Party, certifying and attaching (i) the Operating Documents of such Loan Party, (ii) resolutions duly approved by the Board of such Loan Party, (iii) any resolutions, consent or waiver duly approved by the requisite holders of such Loan Party's Equity Interests, if applicable, and (iv) a schedule of incumbency;

(e) the Perfection Certificate of Pulmonx and each of its Subsidiaries, duly executed by Pulmonx;

(f) final payoff letters and Lien termination documents from Oxford Finance, LLC and Boston Scientific Corporation, each in form and substance satisfactory to Lender;

(g) evidence satisfactory to Lender that the insurance policies and endorsements required by Section 6.5 are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements in favor of Lender;

(h) (i) the annual operating budgets, on a consolidated basis (including income statements, balance sheets and cash flow statements, by month) for fiscal years 2019 and 2020 of Pulmonx and its Subsidiaries, and (ii) annual financial projections for such fiscal years (on a monthly consolidated basis), in each case, as approved by Pulmonx's Board, together with any related business forecasts used in the preparation of such annual financial projections;

(i) a Compliance Certificate for the month ended December 31, 2019, duly executed by a Responsible Officer of Pulmonx;

(j) a certificate from Pulmonx executed by a Responsible Officer of Pulmonx as to, among other things, the items set forth in Sections 3.2(b), 3.2(c) and 3.2(d);

(k) payment of the fees and Lender Expenses then due as specified in Section 2.5; and

(l) a legal opinion of Loan Parties' counsel dated as of the Closing Date.

3.2 Conditions Precedent to all Credit Extensions. Lender's obligation to make each Credit Extension, including the Credit Extensions on the Closing Date, is subject to the following conditions precedent:

(a) except for the Term A Loan advanced on the Closing Date, timely receipt of a duly executed Loan Request;

(b) the representations and warranties in this Agreement and in the other Loan Documents shall be true and correct in all material respects (other than such representations and warranties that are already qualified by materiality, Material Adverse Effect or similar language, in which case such representations and warranties shall be true and correct in all respects) on the date of the Loan Request and on the Funding Date of each Credit Extension; provided, however, that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects (other than such representations and warranties that are already qualified by materiality, Material Adverse Effect or similar language, in which case such representations and warranties shall be true and correct in all respects) as of such date,

(c) no Default or Event of Default shall have occurred and be continuing or result from the Credit Extension;

(d) in Lender's sole but reasonable discretion, there has not been any event or circumstance that has had or could reasonably be expected to have a Material Adverse Effect; and

(e) payment of the fees and Lender Expenses then due as specified in Section 2.5 hereof.

3.3 Covenant to Deliver. Loan Parties agree to deliver to Lender each item required to be delivered to Lender under this Agreement as a condition precedent to any Credit Extension. Loan Parties expressly agree that a Credit Extension made prior to the receipt by Lender of any such item shall not constitute a waiver by Lender of Loan Parties' obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Lender's sole discretion.

3.4 Procedures for Borrowing. To obtain a Credit Extension, Loan Parties must notify Lender by electronic mail or telephone by 12:00 p.m. Eastern Time at least three Business Days prior to the Funding Date of the Credit Extension. If such notification is by telephone, Loan Parties must promptly confirm the notification by delivering to Lender a completed and duly executed Loan Request. On the Funding Date, Lender shall fund the applicable Credit

Extension in the manner requested by such Loan Request provided that each of the conditions precedent to such Credit Extension are satisfied. Lender may make Credit Extensions under this Agreement based on instructions from a Responsible Officer or his or her designee. Lender may rely on any telephone notice given by a person whom such Lender believes is a Responsible Officer or designee. Except as otherwise provided on the Closing Date, Borrowers hereby direct Lender to fund the proceeds of all Credit Extensions to a Deposit Account maintained by a Borrower with CIBC Bank USA.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Each Loan Party hereby grants Lender, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Lender, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. If this Agreement is terminated, Lender's Lien in the Collateral shall continue until the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement or any other Loan Document) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement or any other Loan Document) and at such time as Lender's obligation to make Credit Extensions has terminated, Lender shall, at Loan Parties' sole cost and expense, release its Liens in the Collateral and all rights therein shall revert to the applicable Loan Party. Upon any sale, lease, transfer or other disposition of any item of Collateral of any Loan Party permitted by, and in accordance with, the terms of the Loan Documents, or upon the effectiveness of any consent to the release of the security interest granted hereby in any Collateral pursuant to this Agreement, or upon the release of any Loan Party from its obligations under this Agreement or the applicable Guaranty, if any, in accordance with the terms of the Loan Documents, Lender will, at such Loan Party's sole cost and expense, execute and deliver to such Loan Party such documents as such Loan Party shall reasonably request to evidence the release of such item of Collateral from the assignment and security interest granted hereby; provided, however, that (i) at the time of such request and such release no Event of Default shall have occurred and be continuing and (ii) such Loan Party shall have delivered to Lender, at least ten (10) Business Days' prior to the date of the proposed release, a written request for release describing the item of Collateral, together with a form of release for execution by Lender, and such other information as Lender may reasonably request.

4.2 Priority of Security Interest. Each Loan Party represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that are permitted pursuant to the terms of this Agreement to have superior priority to Lender's Lien under this Agreement). If a Loan Party shall acquire a commercial tort claim with an expected recovery, individually or in the aggregate, in excess of $500,000, Loan Parties shall promptly notify Lender in writing and deliver such other documents as Lender may require to grant Lender a perfected security interest in such commercial tort claim. If a Loan Party shall acquire a certificate with respect to Shares, or any instrument with a value, individually or in the aggregate, in excess of $500,000, such Loan Party shall promptly notify Lender and deliver the same together with a stock power or instrument of transfer and any necessary endorsement, all in form satisfactory to Lender.

4.3 Authorization to File Financing Statements. Each Loan Party hereby authorizes Lender to file at any time financing statements, continuation statements and amendments thereto with all appropriate jurisdictions to perfect or protect Lender's interest or rights hereunder, and each Loan Party will execute and deliver to Lender such other instruments or notices, as may be necessary or as Lender may reasonably request, in order to perfect and preserve the security interest granted or purported to be granted under this Agreement. Each Loan Party further authorizes Lender at any time and from time to time to file, transmit, or communicate, as applicable, financing statements and amendments (a) describing the Collateral as "all personal property of debtor" or "all assets of debtor" or words of similar effect, (b) describing the Collateral as being of equal or lesser scope or with greater detail, or (c) that contain any information required by part 5 of Article 9 of the Code for the sufficiency or filing office acceptance. Each Loan Party acknowledges that it is not authorized to file any financing statement or amendment or termination statement with respect to any financing statement filed in connection with this Agreement without the prior written consent of Lender, subject to such Loan Party's rights under Section 9-509(d)(2) of the Code.

4.4 Pledge of Collateral. Each Loan Party hereby pledges, assigns and grants to Lender a security interest in all Shares in which such Loan Party has any interest, together with all proceeds and substitutions thereof,

all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the Closing Date, or, to the extent not certificated as of the Closing Date, within 10 Business Days of the certification of any Shares, or as required pursuant to Section 6.11, the certificate or certificates for such Shares, to the extent certificated, will be delivered to Lender, accompanied by a stock power or other appropriate instrument of assignment duly executed in blank. To the extent required by the terms and conditions governing the Equity Interests in which a Loan Party has an interest, such Loan Party shall cause the books of each Person whose Equity Interests are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder, Lender may effect the transfer of any securities included in the Collateral (including the Shares) into the name of Lender and cause new certificates representing such securities to be issued in the name of Lender or its transferee. Each Loan Party will execute and deliver such documents, and take or cause to be taken such actions, as Lender may reasonably request to perfect or continue the perfection of Lender's security interest in the Shares. Unless an Event of Default shall have occurred and be continuing, each Loan Party shall be entitled to exercise any voting rights with respect to the Shares in which it has an interest and to give consents, waivers and ratifications in respect thereof and, in any event, no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and during the continuance of an Event of Default.

5. REPRESENTATIONS AND WARRANTIES

Each Loan Party represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority.

(a) Each Loan Party and each of its Subsidiaries are duly existing and in good standing in their respective jurisdictions of formation and are qualified and licensed to do business and are in good standing in any other jurisdiction in which the conduct of their respective business or ownership of property require that they be qualified except where the failure to do so could not reasonably be expected to have a Material Adverse Effect. Borrower Representative is a Registered Organization. In connection with this Agreement, Borrower Representative has delivered to Lender a completed certificate signed by Borrower Representative entitled "**Perfection Certificate**". Except to the extent Borrower Representative has provided notice of a legal name change to Lender in accordance with Section 7.2, (i) each Loan Party's and each Subsidiary's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (ii) each Loan Party and each Subsidiary is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (iii) the Perfection Certificate accurately sets forth each Loan Party's and each Subsidiary's organizational identification number or accurately states that such Loan Party has none; (iv) the Perfection Certificate accurately sets forth each Loan Party's and each Subsidiary's place of business, or, if more than one, its chief executive office as well as such Loan Party's and each Subsidiary's mailing address (if different than its chief executive office); (v) except as set forth in the Perfection Certificate, each Loan Party and each Subsidiary (and each of its predecessors) has not, in the past five years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (vi) all other information set forth on the Perfection Certificate pertaining to each Loan Party and each of its Subsidiaries is accurate and complete in all material respects (it being understood and agreed that such Loan Party may from time to time update certain information in the Perfection Certificate (including the information set forth in clause (iv) above) after the Closing Date to the extent permitted by one or more specific provisions in this Agreement; such updated Perfection Certificate subject to the review and approval of Lender). If any Loan Party or any of its Subsidiaries is not now a Registered Organization but later becomes one, such Loan Party shall notify Lender of such occurrence and provide Lender with such Person's organizational identification number within 5 Business Days of receiving such organizational identification number.

(b) The execution, delivery and performance by each Loan Party of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with such Loan Party's Operating Documents or other organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate, in any material respect, any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which such Loan Party or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental

Approvals which have already been obtained and are in full force and effect), or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which such Loan Party is bound. No Loan Party is in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a Material Adverse Effect. No Subsidiary which is not a Loan Party owns any material Intellectual Property.

5.2 Collateral.

(a) Each Loan Party has good title to, rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens.

(b) Except for the Collateral Accounts described in the Perfection Certificate or in a notice timely delivered pursuant to Section 6.6, no Loan Party has any Collateral Accounts at or with any bank, broker or other financial institution, and each Loan Party has taken such actions as are necessary to give Lender a perfected security interest therein as required pursuant to the terms of Section 6.6(b). The Accounts are bona fide, existing obligations of the Account Debtors.

(c) On the Closing Date, and except as disclosed on the Perfection Certificate, (i) the Collateral is not in the possession of any third party bailee (such as a warehouse), and (ii) no such third party bailee possesses any Collateral with an aggregate value in excess of $250,000. None of the Collateral shall be maintained at locations other than as disclosed in the Perfection Certificates on the Closing Date or as permitted pursuant to Section 6.12.

(d) Each Loan Party is the sole owner of the Intellectual Property which it owns or purports to own except for (i) licenses constituting Permitted Transfers, (ii) open-source software, (iii) over-the-counter software that is commercially available to the public, (iv) material Intellectual Property licensed to such Loan Party and noted on the Perfection Certificate or as disclosed pursuant to Section 6.7(b), and (v) immaterial Intellectual Property licensed to such Loan Party. To the best of each Loan Party's knowledge, each Patent (other than patent applications) which it owns or purports to own and which is material to such Loan Party's business is valid and enforceable, and no part of the Intellectual Property which a Loan Party owns or purports to own and which is material to Loan Parties' business has been judged invalid or unenforceable, in whole or in part. To the best of each Loan Party's knowledge, no claim has been made that any part of the Intellectual Property violates the rights of any third party except to the extent such claim could not reasonably be expected to have a Material Adverse Effect. Except as noted on the Perfection Certificate or as disclosed pursuant to Section 6.7(b), no Loan Party is a party to, nor is it bound by, any Restricted License.

(e) As of the Closing Date, no Collateral consisting of promissory notes is evidenced by an original instrument, and except for the Shares of Subsidiaries, no Investments consisting of equity interests of a third person are evidenced by certificates. All Collateral consisting of certificated securities or instruments has been delivered to Lender to be held as possessory collateral with such powers or allonges as Lender may require.

5.3 Litigation and Proceedings. Except as set forth in the Perfection Certificate or as disclosed in writing pursuant to Section 6.2, there are no actions, suits, litigations or proceedings, at law or in equity, pending, or, to the knowledge of any Responsible Officer, threatened in writing, by or against any Loan Party, any of its Subsidiaries or any officers or directors of the foregoing involving more than, individually or in the aggregate for all related proceedings, $250,000. None of such actions, suits, litigations or proceedings, individually or collectively, could reasonably be expected to have a Material Adverse Effect.

5.4 Financial Statements; Financial Condition. All financial statements for Loan Parties and each of their Subsidiaries delivered to Lender fairly present in all material respects the consolidated financial condition and results of operations of Loan Parties and each of their Subsidiaries as of the respective dates and for the respective periods then ended, and there are no material liabilities (including any contingent liabilities) which are not reflected in such financial statements. There has not been any material deterioration in the consolidated financial condition of any Loan Party or any of its Subsidiaries or the Collateral since the date of the most recent financial statements submitted to Lender.

5.5 Solvency. The fair salable value of the assets (including goodwill minus disposition costs) of Loan Parties and each of their Subsidiaries, on a consolidated basis, exceeds the fair value of liabilities of Loan Parties' and

each of their Subsidiaries, on a consolidated basis; no Loan Party is left with unreasonably small capital after the transactions in this Agreement; and each Loan Party is able to pay its debts (including trade debts) as they mature.

5.6 Consents; Approvals. Each Loan Party has obtained all third party or governmental consents, licenses, approvals, waivers, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to enter into the Loan Documents and consummate the transactions contemplated thereby. Each Loan Party and each of its Subsidiaries has obtained all third party or governmental consents, licenses, approvals, waivers, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted, except where failure to do so could not reasonably be expected to result in a Material Adverse Effect.

5.7 Subsidiaries; Investments. No Loan Party has any Subsidiaries, except as noted on the Perfection Certificate or as disclosed to Lender pursuant to Section 6.11. No Loan Party owns any stock, partnership, or other ownership interest or other Equity Interests except for Permitted Investments.

5.8 Tax Returns and Payments; Pension Contributions. Each Loan Party and each of its Material Subsidiaries has timely filed all required tax returns and reports (or appropriate extensions therefor), and such Loan Party and each of its Material Subsidiaries has timely paid all foreign, federal, state and local Taxes, assessments, deposits and contributions owed by such Loan Party or such Material Subsidiary, as applicable, except to the extent such Taxes are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor. No Loan Party is aware of any written claims or adjustments proposed for any prior tax years of any Loan Party or any of its Material Subsidiaries which could result in a material amount of additional Taxes becoming due and payable by a Loan Party or any of its Material Subsidiaries. Each Loan Party and each of its Material Subsidiaries have paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and neither such Loan Party nor any of its Material Subsidiaries have, withdrawn from participation in, and have not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of such Loan Party or its Material Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Authority.

5.9 Shares. Such Loan Party has full power and authority to create a first lien on the Shares and no disability or contractual obligation exists that would prohibit such Loan Party from pledging the Shares pursuant to this Agreement. To such Loan Party's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable (to the extent such concepts exist under applicable law). To such Loan Party's knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and such Loan Party knows of no reasonable grounds for the institution of any such proceedings.

5.10 Compliance with Laws.

(a) No Loan Party or Subsidiary of a Loan Party is an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company", as such terms are defined in the Investment Company Act of 1940 as amended.

(b) No Loan Party or Subsidiary of a Loan Party is engaged, nor will it engage, principally or as one of its important activities, in the business of extending credit for the purpose of "purchasing" or "carrying" any "margin security" as such terms are defined in Regulation U of the Federal Reserve Board as now and from time to time hereafter in effect (such securities being referred to herein as "**Margin Stock**"). None of the proceeds of the Credit Extensions or other extensions of credit under this Agreement have been (or will be) used, directly or indirectly, for the purpose of purchasing or carrying any Margin Stock, for the purpose of reducing or retiring any Indebtedness which was originally incurred to purchase or carry any Margin Stock or for any other purpose which might cause any of the Credit Extensions or other extensions of credit under this Agreement to be considered a "purpose credit" within the meaning of Regulation T, U or X of the Federal Reserve Board.

(c) No Loan Party has taken or permitted to be taken any action which might cause any Loan Document to violate any regulation of the Federal Reserve Board. Neither the making of the Credit Extensions by the Lender hereunder nor Loan Parties' use of the proceeds thereof will violate the Trading with the Enemy Act, as amended, or any of the foreign assets control regulations of the United States Treasury Department (31 CFR, Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto. No Loan Party, nor any of its Subsidiaries, nor, to the knowledge of any Loan Party, any Affiliate of any Loan Party or of any Subsidiary, nor any present holder of Equity Interests of any of the foregoing (i) is, or will become, a Person described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control of the United States Department of Treasury ("**OFAC**") or in Section 1 of the Anti-Terrorism Order, (ii) is, or will become, a citizen or resident of any country that is subject to embargo or trade sanctions enforced by OFAC, (iii) is, or will become, a Person whose property or interest in property is blocked or subject to blocking pursuant to Section 1 of the Anti-Terrorism Order or similar sanctions laws of any other Governmental Authority, or (iv) engages or will engage in any dealings or transactions, or is or will be otherwise associated, with any such Person.

(d) Each Loan Party and its Subsidiaries are in compliance, in all material respects, with the USA Patriot Act. No part of the proceeds from the Credit Extensions made hereunder has been (or will be) used, directly or indirectly, for any payments to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended, assuming in all cases that such Act applies to Loan Parties and their Subsidiaries.

(e) No Reportable Event or Prohibited Transaction, as defined in ERISA has occurred or is reasonably expected to occur, and no Loan Party has failed to meet the minimum funding requirements of ERISA. No Loan Party has violated any applicable environmental laws in any material respect, maintains any properties or assets which have been designated in any manner pursuant to any environmental protection statute as a hazardous materials disposal site, or has received any notice, summons, citation or directive from the Environmental Protection Agency or any other similar Governmental Authority.

5.11 Broker. No Person has any agreement or option to provide financial advisory services to any Loan Party or any of its Subsidiaries or to receive any finder's fee or similar fee with respect to this Agreement.

5.12 Accounts Receivable.

(a) Each Account and each document, instrument, and agreement relating thereto or executed in connection therewith: (i) is genuine and enforceable in all material respects in accordance with its terms except for such limits thereon arising from bankruptcy and similar laws relating to creditors' rights; (ii) is not subject to any deduction or discount (other than as stated in the invoice and disclosed to Lender in writing), defense, set-off, claim, or counterclaim, in each case, of a material nature against such Loan Party except as to which such Loan Party promptly notified Lender in writing; (iii) is not subject to any other circumstances that would impair, in any material respect, the validity, enforceability or amount of such Collateral except as to which such Loan Party promptly notified Lender in writing; (iv) arises from a bona fide sale of goods or delivery of services in the ordinary course and in accordance with the terms and conditions of any applicable purchase order, contract or agreement; (v) is free of all Liens other than Permitted Liens; and (vi) is for a liquidated amount due as stated in the invoice therefor.

(b) All statements made and all unpaid balances appearing in all invoices, instruments and other documents evidencing each Account are and shall be true and correct and all such invoices, instruments and other documents, and all of Loan Parties' Books, are genuine and in all material respects what they purport to be. At all times while an Event of Default has occurred and is continuing, and otherwise no more than once per year (including pursuant to a field examination), Lender may notify any Account Debtor owing any Borrower money of Lender's security interest in such funds and verify the amount of such Account. All sales and other transactions underlying or giving rise to each Account shall comply in all material respects with all applicable laws and governmental rules and regulations. Borrowers have no knowledge of any actual or imminent Insolvency Proceeding of any Account Debtor whose outstanding obligations to Borrower are, in the aggregate, material.

5.13 Full Disclosure. No written representation, warranty or other statement of a Loan Party or any of its Subsidiaries in any certificate or written statement given to Lender by or on behalf of a Loan Party or any of its

Subsidiaries, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Lender, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading in light of the circumstances under which they were made (after giving effect to all supplements and updates thereto) (it being recognized by Lender that the projections and forecasts provided by any Loan Party in good faith and based upon assumptions believed by such Loan Party to be reasonable are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

6. AFFIRMATIVE COVENANTS

Each Loan Party shall, and shall cause each of its Subsidiaries to, do all of the following:

6.1 Government Compliance. Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify could reasonably be expected to have a Material Adverse Effect; comply, and cause each Subsidiary to comply, with all laws, ordinances and regulations to which it is subject except where a failure to do so could not reasonably be expected to have a Material Adverse Effect; obtain all of the Governmental Approvals required in connection with such Loan Party's business and for the performance by each Loan Party of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Lender in the Collateral, and comply with all terms and conditions with respect to such Governmental Approvals. Borrower Representative shall promptly provide copies to Lender of any material Governmental Approvals obtained by any Loan Party or any of its Subsidiaries.

6.2 Financial Statements, Reports, Certificates. Provide Lender with the following:

(a) Monthly Financial Statements. Within 30 days after the last day of each month, a company prepared consolidated and consolidating balance sheet and income statement covering Loan Parties and each of their Subsidiaries' consolidated operations for such month, in form acceptable to Lender, certified by a Responsible Officer as having been prepared in accordance with GAAP, consistently applied, except for the absence of footnotes, and subject to normal year-end adjustments, and a copy of the general ledger. Concurrently with delivery of the monthly financial statements for the last month of each quarter, Borrower shall also provide Lender with a comparison with the budget for such fiscal quarter and a comparison with the corresponding fiscal quarter of the previous fiscal year.

(b) Cash Report; Flash Sales. As soon as available, but no later than 30 days after the last day of each month, a cash report and flash sales report in a form reasonably acceptable to Lender.

(c) Annual Operating Budget and Financial Projections. Within 60 days after the end of each fiscal year of Borrower Representative (and promptly and within five days of any material modification thereto), (i) annual operating budgets, on a consolidated basis (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower Representative, and (ii) annual financial projections for such fiscal year (on a monthly consolidated basis), in each case, as approved by Borrower Representative's Board (such annual financial projections as originally delivered to Lender are referred to herein as the "**Annual Projections**"; provided that, any revisions to the Annual Projections approved by Borrower Representative's Board shall be delivered to Lender no later than seven days after such approval), together with any related business forecasts used in the preparation of such annual financial projections and a comparison to the last year's results for the same period, in each case, in form and substance acceptable to Lender.

(d) Annual Audited Financial Statements. As soon as available, but no later than the earlier of (i) 180 days after the last day of Borrower Representative's fiscal year and (ii) prior to an initial public offering of Borrower Representative's common stock, delivery thereof to the Lead Investor, audited consolidated financial statements prepared in accordance with GAAP, consistently applied, together with any management letter prepared with respect thereto. The annual consolidated financial statements shall be audited by an independent certified public accounting firm reasonably acceptable to Lender (it being understood that BDO USA, LLP and any other accounting firm of national standing are reasonably acceptable to Lender) and accompanied by an unqualified opinion on such financial statements from such independent certified public accounting firm.

(e) Compliance Certificate. Within 30 days after the last day of each month and together with the financial statements delivered pursuant to Sections 6.2(a) and 6.2(d), a duly completed Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Loan Parties were in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Lender may reasonably request, including a description of recent events during the relevant period.

(f) Other Statements. Within five days of delivery, copies of all statements, reports and notices generally made available to all Borrower Representative's Equity Interest holders or to all holders of Borrower Representative's Preferred Stock or to any holders of Indebtedness, other than with respect to Permitted Indebtedness constituting trade credit or capital lease obligations.

(g) SEC Filings. In the event that Borrower Representative becomes subject to the reporting requirements under the Exchange Act, copies of all periodic and other reports, proxy statements and other materials filed by Borrower Representative with the Securities and Exchange Commission within five days after such reports, proxy statements and/or other materials were filed. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the Securities and Exchange Commission) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower Representative posts such documents, or provides a link thereto, on Borrower Representative's website on the internet at Borrower Representative's website address.

(h) Legal Action Notice. A prompt report of any legal actions pending or threatened in writing against any Loan Party or any of its Subsidiaries that could reasonably be expected to result in damages or costs to any Loan Party or any of its Subsidiaries of, individually or in the aggregate for all related proceedings, $250,000 or more or which could reasonably be expected to have a Material Adverse Effect, or of any Loan Party or any of its Subsidiaries taking or threatening legal action against any third person with respect to a material claim, and with respect to any pending action or threatened action, a prompt report of any material development with respect thereto. If an estimate of such Loan Party's or such Subsidiary's liability may commercially reasonably be determined in such party's reasonable discretion at the time of each applicable notice or report, such notice or report shall include such an estimate, which estimate shall be determined reasonably and in good faith; provided, that each such estimate may be updated reasonably and in good faith by such Loan Party or Subsidiary from time to time.

(i) Valuation Reports; Capitalization Tables. A copy of each 409A valuation report as to Borrower Representative's capital stock that Borrower Representative receives after the Closing Date, together with the Compliance Certificate for the month in which Borrower Representative receives such report, and if there is any material modification to the aggregate fully-diluted capitalization numbers as set forth in the version most recently delivered to Lender, an updated copy of Borrower Representative's summary capitalization table together with the Compliance Certificate for the month in which such material modification occurred.

(j) Board Materials. Copies of all materials that Borrower Representative provides to its Board in connection with general session meetings of Borrower Representative's Board and all minutes of such general session meetings within 30 days after the last day of the month in which such materials were delivered to the members of Borrower Representative's Board; provided, however, the foregoing may be subject to such exclusions and redactions as Borrower Representative deems reasonably necessary, in the exercise of its good faith judgment, (i) in order to (A) preserve the confidentiality of highly sensitive proprietary information or (B) prevent impairment of the attorney client privilege or (ii) as a result of a conflict of interest with Lender for new financing.

(k) Intellectual Property Report. (i) Together with the Compliance Certificate delivered for the end of each calendar month constituting the end of a fiscal quarter, a report in form reasonably acceptable to Lender, listing (X) any material change in the composition of the Intellectual Property, (Y) any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, obtained by any Loan Party, and (Z) applications for any Patent or the registration of any Trademark made by any Loan Party, and (ii) prompt notice of any event that could reasonably be expected to materially and adversely affect the value of the Intellectual Property.

(l) Other Reports and Information. Together with the monthly financial reports, in form acceptable to Lender, any information related to the financial or business condition of any Loan Party as and when reasonably requested by Lender.

(m) Bank Account Statements. Together with the Compliance Certificate delivered for the end of each calendar month, a copy of each account statement, with transaction detail, for each Deposit Account or Securities Account of a Loan Party or any of its Subsidiaries not held at Lender, or within three days, upon Lender's request, evidence satisfactory to Lender of the balance maintained in any such Deposit Account or Securities Account.

(n) Equity Financing Documents. Together with the initial Compliance Certificate due after the closing of any future round of equity financing, a copy of the documents entered into in connection with the financing consummated after the Closing Date.

(o) Operating Documents. Prompt notice of any material amendments of or other material changes to the Operating Documents of any Loan Party or any of its Subsidiaries, together with any copies reflecting such amendments or changes with respect thereto and prior to an initial public offering of Borrower Representative's common stock, any material amendments and material changes to the capitalization table of Borrower Representative upon Lender's request and in any event annually, together with Borrower Representative's delivery of its audited consolidated financial statements;

(p) Insurance. Notice of any reduction in insurance coverage at least 30 days prior to the proposed effective date of such reduction.

(q) Defaults. Without limiting or contradicting any other more specific provision of this Agreement, promptly (and in any event within three Business Days) upon any Loan Party becoming aware of the existence of any Default or Event of Default, such Loan Party shall give written notice to Lender of such occurrence, which such notice shall include a reasonably detailed description of such Default or Event of Default.

6.3 Inventory; Returns. Keep all Inventory in good and marketable condition, free from material defects. Returns and allowances between a Loan Party or any Subsidiary, on the one hand, and its Account Debtors, on the other hand, shall follow such Loan Party's customary practices as they exist at the Closing Date. Borrower Representative shall promptly notify Lender of all returns, recoveries, disputes and claims that involve more than $250,000 individually or in the aggregate in any calendar year.

6.4 Taxes; Pensions. (a) Timely file, and cause each of its Material Subsidiaries to timely file, all required tax returns and reports, (b) timely pay, and require each of its Material Subsidiaries to timely pay, all foreign, federal, state and local Taxes, assessments, deposits and contributions owed by such Loan Party and each of its Material Subsidiaries, except, in each case, for deferred payment of any Taxes contested pursuant to the terms of Section 5.8, and (c) deliver to Lender, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.5 Insurance.

(a) Keep, and cause each Subsidiary to keep, its business and the Collateral insured for risks and in amounts standard for companies in Loan Parties' industry and location and as Lender may reasonably request. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of any Loan Party, and in amounts that are reasonably satisfactory to Lender.

(b) Ensure that proceeds payable under any property policy with respect to Collateral or key man insurance are, at Lender's option, payable to Lender on account of the Obligations. To that end, all property policies shall have a lender's loss payable endorsement showing Lender as lender loss payee, all liability policies shall show, or have endorsements showing, Lender as an additional insured, in each case, in form satisfactory to Lender and as set forth on Exhibit E.

(c) Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Loan Parties shall have the option of applying the proceeds of any casualty policy up to $100,000 with

respect to any loss, but not exceeding $250,000 in the aggregate for all losses, under all casualty or property policies in any fiscal year, toward the prompt replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Lender has been granted a first priority security interest and (b) after the occurrence and during the continuance of an Event of Default, all such proceeds shall, at the option of Lender, be payable to Lender on account of the Obligations.

(d) At Lender's request, Borrower Representative shall deliver certified copies of insurance policies and evidence of all premium payments. Each provider of any such insurance required under this Section 6.5 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Lender, that it will give Lender 30 days prior written notice before any such policy or policies shall be canceled (or 10 days' notice for cancellation for non-payment of premiums).

(e) If any Loan Party fails to obtain insurance as required under this Section 6.5 or to pay any amount or furnish any required proof of payment to third persons and Lender, Lender may make all or part of such payment or obtain such insurance policies required in this Section 6.5, and take any action under the policies Lender deems prudent. Lender shall endeavor to give written notice to Borrower prior to taking such action, but any failure to so endeavor or to give such notice shall not be a breach of this Agreement.

6.6 Accounts.

(a) Other than to the extent permitted under Sections 6.15 and 7.12 (and except with respect to Pulmonx Switzerland, to the extent the Swiss Security Conditions are satisfied), maintain all of their, and all of their Subsidiaries', operating accounts in the United States and Canada with Lender and Lender's Affiliates.

(b) Each Loan Party shall provide Lender five days' prior written notice before such Loan Party establishes any Collateral Account at or with any Person other than Lender. Each Loan Party (other than Pulmonx Switzerland, solely as it relates to Collateral Accounts maintained in jurisdictions in which Account Control Agreements are not required in order to perfect or enhance the priority of Lender's Lien in such Collateral Accounts and to the extent the Swiss Security Conditions have been satisfied) shall cause the applicable bank or financial institution (other than Lender) at or with which any Collateral Account is maintained to execute and deliver an Account Control Agreement with respect to such Collateral Account to perfect Lender's Lien in such Collateral Account in accordance with the terms hereunder which Account Control Agreement may not be terminated without the prior written consent of Lender. The provisions of the previous sentence shall not apply to Deposit Accounts exclusively used for payroll, payroll taxes, and other employee wage and benefit payments to or for the benefit of Loan Parties' employees and identified to Lender by Loan Parties as such (collectively, the "**Excluded Accounts**").

6.7 Intellectual Property.

(a) Use commercially reasonable efforts to protect, defend and maintain the validity and enforceability of its Intellectual Property material to its business; promptly advise Lender in writing of material infringements by a third party of its Intellectual Property material to its business; and not allow any Intellectual Property material to Loan Parties' business to be abandoned, forfeited or dedicated to the public without Lender's written consent.

(b) If any Loan Party (i) obtains any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner or licensee, or (ii) applies for any Patent or the registration of any Trademark, then Borrower Representative shall promptly provide written notice thereof to Lender and shall execute such intellectual property security agreements and other documents and take such other actions as Lender may request to perfect and maintain a first priority perfected security interest in favor of Lender in such property; provided that with respect to Patents and Trademarks, Loan Parties shall only be required to provide such information with the quarterly reports provided under Section 6.2(k). If a Loan Party decides to register any Copyrights or mask works in the United States Copyright Office, Borrower Representative shall: (x) provide Lender with at least 15 days prior written notice of such Loan Party's intent to register such Copyrights or mask works together with a copy of the application it intends to file with the United States Copyright Office (excluding exhibits thereto); (y) execute an intellectual property security agreement and such other documents and take such other actions as Lender may request to perfect and maintain a first priority perfected security interest in favor of Lender in the Copyrights or

mask works intended to be registered with the United States Copyright Office; and (z) record such intellectual property security agreement with the United States Copyright Office contemporaneously with filing the Copyright or mask work application(s) with the United States Copyright Office. Borrower Representative shall promptly provide to Lender copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement required for Lender to perfect and maintain a first priority perfected security interest in such property.

(c) Provide written notice to Lender at least 10 days prior to entering into or becoming bound by any Restricted License (other than off the shelf software and services that are commercially available to the public).

6.8 Litigation Cooperation. From the Closing Date and continuing through the termination of this Agreement, make available to Lender (which, prior to the occurrence of an Event of Default, shall be at reasonable times and upon reasonable notice from Lender), without expense to Lender, each Loan Party and its officers, employees and agents and each Loan Party's books and records, to the extent that Lender may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Lender with respect to any Collateral or relating to such Loan Party.

6.9 Access to Collateral; Books and Records; Quarterly Management Meetings.

(a) Allow Lender, or its agents, during regular business hours (unless an Event of Default has occurred) to inspect the Collateral and audit (including pursuant to a field examination or an appraisal) and copy such Loan Party's Books, including accounts receivable (which, prior to the occurrence of an Event of Default, shall be upon reasonable notice from Lender). Such inspections or audits shall be conducted no more often than once every 12 months unless an Event of Default has occurred and is continuing in which case such inspections and audits shall occur as often as Lender shall determine is necessary. The foregoing inspections and audits shall be at Loan Parties' expense.

(b) Hold, by phone or, at the option of Lender, at its principal place of business, meetings of the management of Borrower Representative with Lender at least every calendar quarter, each such meeting to be on a date and at a time mutually convenient to Borrower Representative and Lender.

6.10 Financial Covenants.

(a) Have Revenue for the trailing three-month period ending on each date set forth below of not less than the greater of (i) the amount specified below for such day and (ii) the Revenue for the trailing three-month period ending on the last day of the month for which this covenant had most recently been tested prior to such day:

Month	Revenue
March 31, 2020	$8,571,054
June 30, 2020	$11,039,973
September 30, 2020	$11,768,288
December 31, 2020	$12,976,641
March 31, 2021, and the last day of each June, September, December and March thereafter	An amount equal to 80.00% of the Revenue for the trailing three-month period ending on such day, as set forth in the Annual Projections of Borrower Representative delivered and approved as provided in Section 6.2(c)

(b) As of January 31, 2020 and the last day of each month thereafter, maintain Unrestricted Cash in an aggregate amount greater than the Adjusted EBITDA loss for the three month period ending on such date.

6.11 Subsidiary Matters. If any Loan Party forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Closing Date, or at any time upon Lender's request with respect to any Material Subsidiary: (a) promptly, and in any event within five days of such formation or acquisition, provide written notice to Lender together with certified copies of the Operating Documents for such Subsidiary, and (b) promptly, and in any event within 10 days of such formation or creation: take all such action as may be reasonably required by Lender to

cause such new Subsidiary to (i) either, at the option of Lender in its discretion, (A) provide to Lender a joinder to this Agreement pursuant to which such Subsidiary becomes a Borrower or a Guarantor hereunder, or (B) guarantee the Obligations under the Loan Documents pursuant to a separate Guaranty and (ii) grant a security interest in and to the assets of such Subsidiary (substantially as described on Exhibit B), in each case together with such Account Control Agreements and other documents, instruments and agreements reasonably requested by Lender, all in form and substance satisfactory to Lender (including being sufficient to grant Lender a first priority Lien, subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary and to pledge all of the direct or beneficial Equity Interests in such new Subsidiary. Any document, agreement, or instrument executed or issued pursuant to this Section 6.11 shall be a Loan Document. Notwithstanding the foregoing, compliance with this Section 6.11 shall not be deemed a cure or waiver of any breach of Section 7.3.

6.12 Property Locations.

(a) Provide to Lender at least 30 days' prior written notice before adding any new offices or business or Collateral locations, including warehouses (unless such new offices or business or Collateral locations (i) qualify as Excluded Locations under clause (a) of the definition thereof or (ii) contain less than $500,000 in assets or property of any Loan Party).

(b) With respect to any property or assets of a Loan Party located with a third party, including a bailee, datacenter or warehouse (other than Excluded Locations), Loan Parties shall cause such third party to execute and deliver a Collateral Access Agreement for such location, including an acknowledgment from each of the third parties that it is holding or will hold such property for Lender's benefit. Loan Parties shall deliver to Lender each warehouse receipt, where negotiable, covering any such property.

(c) With respect to any property or assets of a Loan Party located on leased premises (other than Excluded Locations), Loan Parties shall cause such third party to execute and deliver a Collateral Access Agreement for such location.

6.13 Further Assurances.

(a) Execute any further instruments and take further action as Lender reasonably requests to perfect or continue Lender's Lien in the Collateral or to effect the purposes of this Agreement and the other Loan Documents.

(b) Deliver to Lender, within five days after the same are sent or received, copies of all material correspondence, reports, documents and other filings with any Governmental Authority that could reasonably be expected to have a material adverse effect on any of the Governmental Approvals material to any Loan Party's business or otherwise could reasonably be expected to have a Material Adverse Effect.

6.14 Use of Proceeds. Use the proceeds of (a) a portion of the Term A Loan to repay the Indebtedness and other obligations owed by Borrowers to Oxford Finance, LLC and to fund payment of the fees, costs and expenses associated with the closing of the transactions contemplated hereunder and (b) the remaining portion of the Term A Loan and the other Term Loans advanced after the Closing Date for general working capital purposes to the extent consistent with the terms of the Loan Documents and applicable law, and, in each case, not for personal, family, household or agricultural purposes.

6.15 Post-Closing Covenant.

(a) Deliver to Lender duly-executed signatures to the Account Control Agreement required under Section 6.6(b) with respect to the Collateral Accounts maintained with Silicon Valley Bank on or before February 24, 2020.

(b) Deliver to Lender duly-executed signatures to the Account Control Agreements required under Section 6.6(b) with respect to the Collateral Accounts maintained with US Bank, National Association, and Capital Advisors Group on or before March 20, 2020, or such later date as Lender may agree to in writing in its discretion.

(c) Use commercially reasonable efforts to deliver duly-executed signatures to Collateral Access Agreements for all locations of Pulmonx other than any Excluded Locations on or before April 20, 2020.

(d) Except as otherwise permitted in the last sentence of Section 6.6 and Section 7.12(b), deliver evidence to Lender of the closure of all Deposit Accounts and lockbox arrangements maintained by any Loan Party with any institution other than CIBC Bank USA on or before August 18, 2020.

(e) Deliver evidence to Lender of the dissolution of Pulmonx International Development, a Cayman Islands company, and Pulmonx Global B.V., a limited company (*besloten vennootschap*) organized under the laws of the Netherlands, on or before August 18, 2020.

(f) Deliver to Lender duly executed signatures to the Swiss Share Pledge Documents on or before August 18, 2020.

7. NEGATIVE COVENANTS

No Loan Party shall, or shall cause or permit any of its Subsidiaries to, do any of the following:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**") all or any part of its business or property, except for Permitted Transfers.

7.2 Changes in Business, Management, Ownership, or Organization. (a) Engage in any business other than the businesses currently engaged in by such Person, as applicable, or reasonably related thereto; (b) cease doing business, or liquidate or dissolve (except as provided in Section 6.15(d) and that a Subsidiary may liquidate or dissolve so long as such Subsidiary does not have any liabilities at the time of such liquidation or dissolution and, simultaneously with such liquidation or dissolution, all of its assets are transferred to a Borrower or another Loan Party that is a Domestic Subsidiary or, if such Subsidiary is a Foreign Subsidiary, another Loan Party that is a Foreign Subsidiary); (c) fail to provide notice to Lender of any Key Person departing from or ceasing to be employed by Borrower Representative within five days after departure from Borrower Representative; (d) permit or suffer a Change in Control; or (e) without at least 30 days prior written notice to Lender (i) change its jurisdiction of organization, (ii) change its organizational structure or type, (iii) change its legal name, or (iv) change its organizational number (if any) assigned by its jurisdiction of organization.

7.3 Mergers or Acquisitions. Merge or consolidate with any other Person, or acquire, or permit any of its Subsidiaries to acquire all or substantially all of the capital stock or property of another Person (including by the creation or formation of any Subsidiary, except to the extent in compliance with Section 6.11) or enter into any agreement to do any of the same, unless such transaction is a Permitted Investment, provided that, so long as no Event of Default is occurring prior thereto or arises as a result therefrom, a Subsidiary may merge or consolidate into another Subsidiary that is a Loan Party or into a Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, other than Permitted Indebtedness.

7.5 Encumbrance. (a) Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens; or (b) permit any Collateral not to be subject to the first priority security interest granted herein, except for Permitted Liens that are permitted by the terms of this Agreement to have priority over the security interest granted to Lender hereunder.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.6.

7.7 Distributions; Investments. (a) Pay any dividends (other than dividends payable solely in capital stock) or make any distribution or payment in respect of or redeem, retire or purchase any capital stock (other than (i) repurchases (A) pursuant to the terms of employee stock purchase plans, employee restricted stock agreements, stockholder rights plans, director or consultant stock option plans, or similar plans, provided such repurchases do not

exceed $100,000 in the aggregate per fiscal year (which amount may be increased to an amount not to exceed $500,000 in any fiscal year by the amount of cash proceeds from the sale of capital stock of Borrower Representative to employees, directors, officers, managers or consultants of Borrower Representative or any of its Subsidiaries that occurs after the Closing Date)) or (B) after an initial public offering of Borrower Representative's common stock, (ii) the conversion of any convertible securities into other securities pursuant to the terms of such convertible securities as long as the conversion does not involve any payment of cash and (iii) the distribution of equity securities to former or current employees, officers, consultants or directors pursuant to the exercise of employee stock options approved by the Board) or (b) directly or indirectly make any Investment other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of a Loan Party, except for (a) transactions that are in the Ordinary Course of Business and on fair and reasonable terms that are no less favorable to such Person than would be obtained in an arm's length transaction with a non-affiliated Person, (b) bona-fide rounds of Subordinated Debt or equity financing by investors in Borrower Representative for capital raising purposes, (c) reasonable and customary director, officer and employee compensation and other customary benefits including retirement, health, stock option and other benefit plans and indemnification arrangements approved by Borrower Representative's Board, and (d) transactions among Borrower Representative and its Subsidiaries specifically permitted under the Agreement.

7.9 Capital Expenditures. Permit Capital Expenditures to exceed, in any fiscal year, an aggregate amount equal to 110% of the projected Capital Expenditures for such fiscal year, as set forth in the Board-approved operating budgets for such fiscal year delivered to Lender pursuant to Section 6.2(c).

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a Material Adverse Effect, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of a Loan Party or any of its Subsidiaries, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

7.11 Compliance with Anti-Terrorism Laws. Lender hereby notifies each Loan Party and each of its Subsidiaries that pursuant to the requirements of Anti-Terrorism Laws, and Lender's policies and practices, Lender is required to obtain, verify and record certain information and documentation that identifies each Loan Party and each of its Subsidiaries and their principals, which information includes the name and address of each Loan Party and each of its Subsidiaries and their principals and such other information that will allow Lender to identify such party in accordance with Anti-Terrorism Laws. Neither any Loan Party nor any of their Subsidiaries shall, nor shall any Loan Party or any of their Subsidiaries permit any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Each Loan Party and each of its Subsidiaries shall immediately notify Lender if such Loan Party or such Subsidiary has knowledge that any Loan Party, or any Subsidiary or Affiliate of such Loan Party, is listed on the OFAC Lists or (a) is convicted on, (b) pleads nolo contendere to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering. Neither any Loan Party nor any of their Subsidiaries shall, nor shall any Loan Party or any of their Subsidiaries, permit any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

7.12 Subsidiaries Cash.

(a) Permit the aggregate amount of cash and Cash Equivalents at Foreign Subsidiaries (excluding, for purposes of this Section 7.12, Pulmonx Switzerland) of any Loan Party to exceed the lesser of (a) Four Million Dollars ($4,000,000.00) and (b) fifteen percent (15%) of the aggregate amount of cash and Cash Equivalents maintained by the Loan Parties and their Subsidiaries.

(b) In no event shall any Loan Party (other than any Foreign Subsidiary) hold cash in any jurisdiction other than the United States or Canada

7.13 Litigation Settlement. With respect to any litigation, claim or other legal action for which any Loan Party has provided Lender with an aggregate claim amount or expected liability amount on the Perfection Certificate or pursuant to Section 6.2, such Loan Party shall not enter into a settlement agreement with respect to such litigation, claim or other legal action in which such Loan Party's payment liability exceeds (a) 30% above such aggregate claim amount or expected liability amount or (b) such greater amount as may be disclosed by a Loan Party to Lender and agreed upon in writing by Lender.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "**Event of Default**") under this Agreement:

8.1 Payment Default. Any Loan Party fails to (a) make any payment of principal or interest on any Credit Extension when due, or (b) pay any other Obligations within three Business Days after such Obligations are due and payable (which three Business Day cure period shall not apply to payments due on the Term Loan Maturity Date or the date of acceleration pursuant to Section 9.1(a)). During the cure period, the failure to make or pay any payment specified under clause (b) above is not an Event of Default (but no Credit Extension will be made during the cure period).

8.2 Covenant Default.

(a) A Loan Party fails or neglects to perform any obligation in Section 6.2, 6.4, 6.5, 6.6, 6.7, 6.9, 6.10, 6.11, 6.13, 6.14 or 6.15, or violates any covenant in Section 7; or

(b) A Loan Party fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within 10 days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the 10-day period or cannot after diligent attempts by Borrowers be cured within such 10-day period, and such default is likely to be cured within a reasonable time, then Borrowers shall have an additional reasonable period (which shall not, in any case, exceed 30 days) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default but no Credit Extensions will be made.

8.3 Material Adverse Effect. The occurrence of a Material Adverse Effect.

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of a Loan Party or of any of its Subsidiaries, or (ii) a notice of Lien or levy is filed against the assets of any Loan Party or any of its Subsidiaries by any Governmental Authority, and the same under clauses (i) and (ii) above are not, within 10 days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any 10 day cure period; or

(b) (i) any material portion of the assets of a Loan Party or any of its Subsidiaries is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents a Loan Party or any of its Subsidiaries from conducting all or any material part of its business.

8.5 Insolvency. (a) A Loan Party or any of its Subsidiaries, as a whole, is unable to pay its debts (including trade debts) as they become due, the realizable value of Loan Parties' assets is less than the aggregate sum of its liabilities, or Loan Parties otherwise become insolvent; (b) a Loan Party or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against a Loan Party or any of its Subsidiaries and is not dismissed or stayed within 45 days (but no Credit Extensions shall be made while any of the conditions described in clause (a) above exists and/or until any Insolvency Proceeding is dismissed).

8.6 Other Agreements. There is, under any agreement to which a Loan Party or any of its Subsidiaries is a party with a third party or parties, any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of $250,000 or that could reasonably be expected to result in liability to a Loan Party or any of its Subsidiaries in an aggregate amount in excess of $250,000.

8.7 Judgments; Penalties. One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least $250,000 shall be rendered against a Loan Party or any of its Subsidiaries by any Governmental Authority (in each of the foregoing circumstances not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier in writing), and the same are not, within 10 days after the entry, assessment or issuance thereof, discharged, or after execution thereof, stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, stay, or bonding of such fine, penalty, judgment, order or decree).

8.8 Misrepresentations. Any Loan Party or any Person acting for such Loan Party makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Lender or to induce Lender to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made.

8.9 Guaranty. (a) Except for any Guaranty permitted to be and in fact released or terminated by Lender pursuant to this Agreement or the other Loan Documents, any Guaranty terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any Guaranty; (c) any circumstance described in Sections 8.4, 8.5, 8.7 or 8.8 occurs with respect to any Guarantor; or (d) the liquidation, winding up, or termination of existence of any Guarantor.

8.10 Governmental Approval. Any Governmental Approval shall have been revoked, rescinded, suspended, modified in an adverse manner or not renewed for a full term, and such revocation, rescission, suspension, modification or non-renewal has, or could reasonably be expected to have, a Material Adverse Effect.

9. LENDER'S RIGHTS AND REMEDIES

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Lender may, without notice or demand, do any or all of the following:

(a) By notice to Borrower Representative, declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs, all Obligations are immediately due and payable without notice or any other action by Lender);

(b) By notice to Borrower Representative, stop advancing money or extending credit for any Borrower's benefit under this Agreement or under any other agreement between any Loan Party and Lender (but if an Event of Default described in Section 8.5 occurs, all obligations, if any, of Lender to advance money or extend credit for any Borrower's benefit under this Agreement or under any other agreement among Borrowers and Lender shall be immediately terminated without any action by Lender);

(c) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Lender considers advisable, and notify any Person owing a Loan Party money of Lender's security interest in such funds;

(d) make any payments and do any acts it considers necessary or desirable to protect the Collateral and/or its security interest in the Collateral. Loan Parties shall assemble the Collateral if Lender requests and make it available as Lender designates. Lender may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Each Loan Party grants Lender a license to enter and occupy any of its premises, without charge, to exercise any of Lender's rights or remedies;

(e) apply to the Obligations any amount held by Lender owing to or for the credit or the account of a Loan Party;

(f) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Lender is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, a Loan Party's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Lender's exercise of its rights under this Section 9.1, a Loan Party's rights under all licenses and all franchise agreements inure to Lender's benefit;

(g) deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Account Control Agreement or similar agreements providing control of any Collateral;

(h) demand and receive possession of any Loan Party's Books; and

(i) exercise all rights and remedies available to Lender under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney. Each Loan Party hereby irrevocably appoints Lender (and any of Lender's partners, managers, officers, agents or employees) as its lawful attorney-in-fact, with full power of substitution, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) send requests for verification of Accounts or notify Account Debtors of Lender's security interest and Liens in the Collateral; (b) endorse such Loan Party's name on any checks or other forms of payment or security; (c) sign such Loan Party's name on any invoice or bill of lading for any Account or drafts against Account Debtors schedules and assignments of Accounts, verifications of Accounts, and notices to Account Debtors; (d) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Lender determines reasonable; (e) make, settle, and adjust all claims under such Loan Party's insurance policies; (f) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (g) transfer the Collateral into the name of Lender or a third party as the Code permits; and (h) dispose of the Collateral. Each Loan Party further hereby appoints Lender (and any of Lender's partners, managers, officers, agents or employees) as its lawful attorney-in-fact, with full power of substitution, regardless of whether or not an Event of Default has occurred or is continuing to: (x) sign such Loan Party's name on any documents and other Security Instruments necessary to perfect or continue the perfection of, or maintain the priority of, Lender's security interest in the Collateral; (y) execute and do all such assurances, acts and things which such Loan Party is required, but fails to do under the covenants and provisions of the Loan Documents; and (z) take any and all such actions as Lender may reasonably determine to be necessary or advisable for the purpose of maintaining, preserving or protecting the Collateral or any of the rights, remedies, powers or privileges of Lender under this Agreement or the other Loan Documents. Lender's foregoing appointment as each Loan Party's attorney in fact, and all of Lender's rights and powers, coupled with an interest, are irrevocable until all Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement or any other Loan Document) have been fully repaid, in cash, and otherwise fully performed and Lender is under no further obligation to make Credit Extensions hereunder.

9.3 Protective Payments. If a Loan Party fails to obtain the insurance called for by Section 6.5 or fails to pay any premium thereon or fails to pay any other amount which such Loan Party is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Lender may obtain such insurance or make such payment, and all amounts so paid by Lender are Lender Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Lender

will make reasonable efforts to provide Borrower Representative with notice of Lender obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Lender are deemed an agreement to make similar payments in the future or Lender's waiver of any Event of Default.

9.4 Application of Payments and Proceeds Upon Default. If an Event of Default has occurred and is continuing, Lender shall have the right to apply in any order any funds in its possession, whether payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations. Lender shall pay any surplus to Loan Parties by credit to the Deposit Account designated by Loan Parties or to other Persons legally entitled thereto. Loan Parties shall remain liable to Lender for any deficiency. If Lender, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Lender shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Lender of cash therefor.

9.5 Lender's Liability for Collateral. So long as Lender complies with reasonable secured lender practices regarding the safekeeping of the Collateral in the possession or under the control of Lender, Lender shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Loan Parties bear all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Lender's failure, at any time or times, to require strict performance by each Loan Party of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Lender thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Lender's rights and remedies under this Agreement and the other Loan Documents are cumulative. Lender has all rights and remedies provided under the Code, by law, or in equity. Lender's exercise of one right or remedy is not an election and shall not preclude Lender from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Lender's waiver of any Event of Default is not a continuing waiver. Lender's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Each Loan Party waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments or chattel paper.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three Business Days after deposit in the U.S. mail, first class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon confirmation of receipt, when sent by electronic mail transmission; (c) one Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, or email address indicated below. Lender and Loan Parties may change their respective mailing or electronic mail addresses by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to any Loan Party:	Pulmonx Corporation 700 Chesapeake Drive Redwood City, CA 94063 e-mail: [E-mail Address Intentionally Omitted] Attention: Derrick Sung, Ph.D.
If to Lender, for any borrowing request:	Canadian Imperial Bank of Commerce Credit Processing Services 595 Bay Street, 5th floor Toronto, Ontario M5G 2C2 e-mail: [E-mail Address Intentionally Omitted] Attention: Gregory McDonald
For all other notices:	CIBC Innovation Banking 40 King S. West, Suite 5702 Toronto, Ontario M5H 3Y2 e-mail: [E-mail Address Intentionally Omitted] Attention: Mark McQueen, President and Executive Managing Director
With a copy, not constituting notice, to:	Dentons US LLP 303 Peachtree Street, NE Suite 5300 Atlanta, Georgia 30308 e-mail: [E-mail Address Intentionally Omitted] Attention: Shannon C. Baxter

11. CHOICE OF LAW, VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE

Except as otherwise expressly provided in any of the Loan Documents, this Agreement and the other Loan Documents shall be governed by, and construed in accordance with, the laws of the State of New York. Each Loan Party hereby submits to the exclusive jurisdiction of the State and Federal courts in New York County, City of New York, New York; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Lender from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Lender. Each Loan Party expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and each Loan Party hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Each Loan Party hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to such Loan Party at the address set forth in, or subsequently provided by such Loan Party in accordance with, Section 10 and that service so made shall be deemed completed upon the earlier to occur of Loan Parties' actual receipt thereof and three days after deposit in the U.S. mails, proper postage prepaid. Each Loan Party hereby expressly waives any claim to assert that the laws of any other jurisdiction govern this Agreement.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH LOAN PARTY AND LENDER EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR THE PARTIES TO ENTER INTO THIS AGREEMENT. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS AGREEMENT OR ANYWHERE ELSE, EACH LOAN PARTY AGREES THAT IT SHALL NOT SEEK FROM LENDER UNDER ANY THEORY OF LIABILITY (INCLUDING ANY THEORY IN TORTS), ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

12. GUARANTY

12.1 Guaranty. Each Guarantor hereby unconditionally guarantees, as a primary obligor and not merely as a surety, jointly and severally with each other Guarantor when and as due, whether at maturity, by acceleration, by

notice of prepayment or otherwise, the due and punctual performance of all Obligations. Each payment made by each Guarantor pursuant to this Section 12 shall be made as provided in Section 2.6.

12.2 Waivers. Each Guarantor hereby absolutely, unconditionally and irrevocably waives (a) promptness, diligence, notice of acceptance, notice of presentment of payment and any other notice hereunder, (b) demand of payment, protest, notice of dishonor or nonpayment, notice of the present and future amount of the Obligations and any other notice with respect to the Obligations, (c) any requirement that Lender protect, secure, perfect or insure any security interest or Lien or any property subject thereto or exhaust any right or take any action against any other Guarantor, or any Person or any Collateral, (d) any other action, event or precondition to the enforcement hereof or the performance by each such Guarantor of the Obligations, (e) all suretyship defenses and (f) any defense arising by any lack of capacity or authority or any other defense of any Borrower or any other Guarantor or any notice, demand or defense by reason of cessation from any cause of Obligations other than payment and performance in full of the Obligations and any defense that any other guarantee or security was or was to be obtained by Lender.

12.3 No Defense. No invalidity, irregularity, voidableness, voidness or unenforceability of this Agreement or any other Loan Document or any other agreement or instrument relating thereto, or of all or any part of the Obligations or of any collateral security therefor shall affect, impair or be a defense hereunder.

12.4 Guaranty of Payment. The Guaranty hereunder is one of payment and performance, not collection, and the obligations of each Guarantor hereunder are independent of the obligations of any Borrower, any other Guarantor or any other Person, and a separate action or actions may be brought and prosecuted against any Guarantor to enforce the terms and conditions of this Section 12, irrespective of whether any action is brought against any Borrower or any other Guarantor or other Persons or whether any Borrower, any other Guarantor or other Persons are joined in any such action or actions. Each Guarantor waives any right to require that any resort be had by Lender to any security held for payment of the any Obligations or to any balance of any Deposit Account or credit on the books of Lender in favor of any Borrower, any other Guarantor or any other Person. No election to proceed in one form of action or proceedings, or against any Person, or on any Obligations, shall constitute a waiver of Lender's right to proceed in any other form of action or proceeding or against any other Person unless Lender has expressed any such right in writing. Without limiting the generality of the foregoing, no action or proceeding by Lender against any Borrower, any other Guarantor or any other Person under any document evidencing or securing indebtedness of any Borrower or any other Guarantor shall diminish the liability of any Guarantor hereunder, except to the extent Lender receives actual payment on account of the Obligations by such action or proceeding, notwithstanding the effect of any such election, action or proceeding upon the right of subrogation of any Guarantor in respect of any Borrower, any other Guarantor or any other Person.

12.5 Indemnity. As an original and independent obligation under this Agreement, each Guarantor shall (a) indemnify Lender and keep Lender indemnified against all costs, losses, expenses and liabilities of whatever kind resulting from the failure by any party to make due and punctual payment of any of the Obligations or resulting from any of the Obligations being or becoming void, voidable, unenforceable or ineffective against any Borrower (including all legal and other costs, charges and expenses incurred by Lender, or any of them in connection with preserving or enforcing, or attempting to preserve or enforce, its rights under this Agreement and the other Loan Documents), and (b) pay on demand the amount of such costs, losses, expenses and liabilities whether or not Lender have attempted to enforce any rights against any Borrower or any other Person or otherwise.

12.6 Liabilities Absolute. The liability of each Guarantor hereunder shall be absolute, unlimited and unconditional and shall not be subject to any reduction, limitation, impairment, discharge or termination for any reason, including any claim of waiver, release, surrender, alteration or compromise, and shall not be subject to any claim, defense or setoff, counterclaim, recoupment or termination whatsoever by reason of the invalidity or unenforceability of the Obligations, any other Obligations or otherwise. Without limiting the generality of the foregoing, the obligations of each Guarantor shall not be discharged or impaired, released, limited or otherwise affected by:

(a) any change in the manner, place or terms of payment or performance, and/or any change or extension of the time of payment or performance of, release, renewal or alteration of, or any new agreements relating to any Obligations, any security therefor, or any liability incurred directly or indirectly in respect thereof, or any rescission of, or amendment, waiver or other modification of, or any consent to departure from, this Agreement or any other Loan Document, including any increase in the Obligations resulting from the extension of additional credit to any Borrower or otherwise;

(b) any sale, exchange, release, surrender, loss, abandonment, realization upon any property by whomsoever at any time pledged or mortgaged to secure, or howsoever securing, all or any of the Obligations, or any offset there against, or failure to perfect, or continue the perfection of, any Lien in any such property, or delay in the perfection of any such Lien, or any amendment or waiver of or consent to departure from any other guaranty for all or any of the Obligations;

(c) the failure of Lender to assert any claim or demand or to enforce any right or remedy against any Borrower or any Guarantor or any other Person under the provisions of this Agreement or any other Loan Document or any other document or instrument executed and delivered in connection herewith or therewith;

(d) any settlement or compromise of any Obligation, any security therefor or any liability (including any of those hereunder) incurred directly or indirectly in respect thereof or hereof, and any subordination of the payment of all or any part thereof to the payment of obligation (whether due or not) of any Borrower or any Guarantor to creditors of any Borrower or any Guarantor other than any Borrower or any Guarantor;

(e) manner of application of Collateral, or proceeds thereof, to all or any of the Obligations, or any manner of sale or other disposition of any Collateral for all or any of the Obligations or any other assets of any Borrower or any Guarantor; and

(f) any other agreements or circumstance of any nature whatsoever that may or might in any manner or to any extent vary the risk of any Guarantor, or that might otherwise at law or in equity constitute a defense available to, or a discharge of, the Guaranty hereunder and/or the obligations of any Guarantor, or a defense to, or discharge of, any Borrower, any Guarantor or any other Person or party hereto or the Obligations or otherwise with respect to the other financial accommodations to any Borrower pursuant to this Agreement or the other Loan Documents.

12.7 Waiver of Notice. Lender shall have the right to do any of the above without notice to or the consent of any Guarantor and each Guarantor expressly waives any right to notice of, consent to, knowledge of and participation in any agreements relating to any of the above or any other present or future event relating to the Obligations whether under this Agreement or otherwise or any right to challenge or question any of the above and waives any defenses of such Guarantor that might arise as a result of such actions.

12.8 Lender's Discretion. Lender may at any time and from time to time (whether prior to or after the revocation or termination of this Agreement) without the consent of, or notice to, any Guarantor, and without incurring responsibility to any Guarantor or impairing or releasing the Obligations, apply any sums by whomsoever paid or howsoever realized to any Obligations regardless of what Obligations remain unpaid.

12.9 Reinstatement.

(a) The provisions of this Section 12 shall continue to be effective or be reinstated, as the case may be, if claim is ever made upon Lender for repayment or recovery of any amount or amounts received by it in payment or on account of any of the Obligations and it repays all or part of said amount for any reason whatsoever, including by reason of any judgment, decree or order of any court or administrative body having jurisdiction over such Person or the respective property of each, or any settlement or compromise of any claim effected by such Person with any such claimant (including any Borrower or any other Loan Party); and in such event each Guarantor hereby agrees that any such judgment, decree, order, settlement or compromise or other circumstances shall be binding upon such Guarantor, notwithstanding any revocation hereof or the cancellation of any note or other instrument evidencing any Obligation, and such Guarantor shall be and remain liable to Lender for the amount so repaid or recovered to the same extent as if such amount had never originally been received by such Person(s).

(b) Lender shall not be required to marshal any assets in favor of any Guarantor, or against or in payment of any Obligations.

(c) No Guarantor shall be not entitled to claim against any present or future security held by Lender from any Person for the Obligations in priority to or equally with any claim of Lender, or assert any claim for any liability of any Borrower or any other Guarantor to such Guarantor, in priority to or equally with claims of Lender

for the Obligations, and each Guarantor shall not be entitled to compete with Lender with respect to, or to advance any equal or prior claim to any security held by Lender for the Obligations.

(d) If any Borrower or any Guarantor makes any payment to Lender, which payment is wholly or partly subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to any Person under any federal or provincial statute or at common law or under equitable principles, then to the extent of such payment, the Obligation intended to be paid shall be revived and continued in full force and effect as if the payment had not been made, and the resulting revived Obligation shall continue to be guaranteed, uninterrupted, by such Guarantor hereunder.

(e) All present and future monies payable by any Borrower to each Guarantor, whether arising out of a right of subrogation or otherwise, are assigned to Lender for its benefit as security for such Guarantor's liability to Lender hereunder and are postponed and subordinated to Lender's prior right to payment in full of Obligations. All such monies received by any Guarantor from any Borrower or any other Guarantor shall be held by such Guarantor as agent and trustee for Lender. This assignment, postponement and subordination shall only terminate when the Obligations are paid in full in cash and this Agreement is irrevocably terminated.

(f) Each Borrower and each Guarantor acknowledges this assignment, postponement and subordination and, except as otherwise set forth herein, agrees to make no payments to any Guarantor without the prior written consent of Lender. Each Borrower and each Guarantor agree to give full effect to the provisions hereof.

12.10 Action Upon Event of Default. Upon the occurrence and during the continuance of any Event of Default, Lender may, without notice to or demand upon any Borrower, any Guarantor or any other Person, declare any obligations of any Guarantor under this Section 12 immediately due and payable, and shall be entitled to enforce the obligations of such Guarantor under this Section 12. Upon such declaration by Lender, Lender is hereby authorized at any time and from time to time to set off and apply any and all deposits (general or special, time or demand, provisions or final) at any time held and other indebtedness at any time owing by Lender to or for the credit or the account of such Guarantor against any and all of the obligations of such Guarantor now or hereafter existing hereunder, whether or not Lender shall have made any demand hereunder against any Borrower or any other Person and although such obligations may be contingent and unmatured. The rights of Lender hereunder are in addition to other rights and remedies (including other rights of set-off) which Lender may have. Upon such declaration by Lender, with respect to any claims (other than those claims referred to in Section 12.9) of such Guarantor against any Borrower or any other Guarantors (for purposes of this Section 12.10, the "**Guarantor Claims**"), Lender shall have the full right on the part of Lender in its own name or in the name of such Guarantor to collect and enforce such Guarantor Claims by legal action, proof of debt in bankruptcy or other liquidation proceedings, vote in any proceeding for the arrangement of debts at any time proposed, or otherwise, Lender and each of its officers being hereby irrevocably constituted attorneys-in-fact for such Guarantor for the purpose of such enforcement and for the purpose of endorsing in the name of such Guarantor any instrument for the payment of money. Each Guarantor will receive as trustee for Lender and will pay to Lender forthwith upon receipt thereof any amounts which such Guarantor may receive from any Borrower or any other Guarantor on account of the Guarantor Claims. Each Guarantor agrees that at no time hereafter will any of the Guarantor Claims be represented by any notes or other negotiable instruments or writings, except and in such event they shall either be made payable to Lender, or if payable to such Guarantor, shall forthwith be endorsed by such Guarantor to Lender. Each Guarantor agrees that no payment on account of the Guarantor Claims or any security interest therein shall be created, received, accepted or retained during the continuance of any Event of Default nor shall any financing statement be filed with respect thereto by such Guarantor.

12.11 Statute of Limitations. Any acknowledgment or new promise, whether by payment of principal or interest or otherwise and whether by any Borrower or any other Loan Party or others (including Lender) with respect to any of the Obligations shall, if the statute of limitations in favor of a Loan Party against Lender shall have commenced to run, toll the running of such statute of limitations and, if the period of such statute of limitations shall have expired, prevent the operation of such statute of limitations.

12.12 Interest. All amounts due, owing and unpaid from time to time by any Guarantor under this Section 12, to the extent such amounts do not otherwise include interest accruing on the outstanding Obligations to the date all such amounts are actually paid by such Loan Party, shall bear interest at the interest rate per annum then chargeable with respect to Term C Loan.

12.13 Guarantor's Investigation. Each Guarantor acknowledges receipt of a copy of each of this Agreement and the other Loan Documents. Each Guarantor has made an independent investigation of each Borrower and each other Loan Party and of the financial condition of each Borrower and each other Loan Party. Lender has not made and Lender does not make any representations or warranties as to the income, expense, operation, finances or any other matter or thing affecting any Borrower or any other Loan Party, nor has Lender made any representations or warranties as to the amount or nature of the Obligations to which this Section 12 applies as specifically herein set forth, nor has Lender or any officer, agent or employee of Lender or any representative thereof, made any other oral representations, agreements or commitments of any kind or nature, and each Guarantor hereby expressly acknowledges that no such representations or warranties have been made and each Loan Party expressly disclaims reliance on any such representations or warranties.

12.14 Limitation of Liability. Each Guarantor, and, by its acceptance of the Guaranty hereunder, Lender hereby confirm that it is the intention of all such Persons that the Guaranty hereunder and the Obligations of such Guarantor hereunder not constitute a fraudulent transfer or conveyance for purposes of the Bankruptcy Code, the UFTA, the UFCA or any other federal, state or foreign bankruptcy, insolvency, receivership or similar law to the extent applicable to the Guaranty hereunder and the Obligations of each Guarantor hereunder. To effectuate the foregoing intention, Lender, by its acceptance of the Guaranty hereunder, and each Guarantor hereby irrevocably agree that the Obligations of Guarantor under the Guaranty hereunder at any time shall be limited to the maximum amount as will result in the Obligations of Guarantor under the Guaranty hereunder not constituting a fraudulent transfer or conveyance.

12.15 Subrogation, Contribution, Etc.

(a) To the extent that any Guarantor shall, under the Guaranty hereunder, make a payment (each, a "**Guarantor's Payment**") of a portion of the Obligations, then, without limiting its rights of subrogation against any Borrower, such Guarantor shall be entitled to contribution and indemnification from, and be reimbursed by, each of Borrowers and the other Guarantors (collectively, the "**Contributing Parties**") in an amount, for each such Contributing Party, equal to a fraction of such Guarantor's Payment, the numerator of which fraction is such Contributing Party's Allocable Amount (as defined below) and the denominator of which is the sum of the Allocable Amounts of all of the Contributing Parties.

(b) As of any date of determination, the "**Allocable Amount**" of each Contributing Party shall be equal to the maximum amount of liability which could be asserted against such Contributing Party hereunder with respect to the applicable Guarantor's Payment without (i) rendering such Contributing Party "insolvent" within the meaning of Section 101(31) of the Bankruptcy Code or Section 2 of either the Uniform Fraudulent Transfer Act (the "**UFTA**") or the Uniform Fraudulent Conveyance Act (the "**UFCA**"), (ii) leaving such Contributing Party with unreasonably small capital, within the meaning of Section 548 of the Bankruptcy Code or Section 4 of the UFTA or Section 5 of the UFCA, or (iii) leaving such Contributing Party unable to pay its debts as they become due within the meaning of Section 548 of the Bankruptcy Code or Section 4 of the UFTA or Section 6 of the UFCA. The provisions of this Section 12.15 shall in no respect limit the obligations and liabilities of each Guarantor to Lender, and each Guarantor shall remain liable to Lender for the full amount guaranteed by such Guarantor hereunder.

(c) Notwithstanding anything to the contrary in this Section 12.15 or otherwise, each Guarantor expressly waives any and all rights of subrogation, reimbursement, indemnity, exoneration, contribution of any other claim which such Guarantor may now or hereafter have against Borrowers or the other Guarantors or any other Person directly or contingently liable for the Obligations, or against or with respect to the property or any Borrower or any other Guarantor (including any property which is Collateral for the Obligations), arising from the existence or performance of this Agreement, until termination of this Agreement and repayment in full of the Obligations.

12.16 Termination. The provisions of this Section 12 shall remain in effect until the indefeasible payment in full in cash of all Obligations and irrevocable termination of this Agreement.

13. GENERAL PROVISIONS

13.1 Termination Prior to Term Loan Maturity Date; Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known

to exist and any other obligations which, by their terms, are to survive the termination of this Agreement or any other Loan Document) have been satisfied in full, in cash and Lender no longer has any obligation to extend credit to a Borrower. So long as Loan Parties have satisfied the Obligations (other than contingent indemnification obligations as to which no claim has been asserted or is known to exist and any other obligations which, by their terms, are to survive the termination of this Agreement or any other Loan Document), this Agreement may be terminated prior to the Term Loan Maturity Date by Borrowers, effective three Business Days after written notice of termination is given to Lender. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination.

13.2 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. No Loan Party may assign this Agreement or any rights or obligations under it without Lender's prior written consent (which may be granted or withheld in Lender's discretion). Lender has the right, without the consent of or notice to Loan Parties, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Lender's obligations, rights, and benefits under this Agreement and the other Loan Documents. If Lender sells or grants a participation, it shall maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Term Loans or other obligations under the Loan Documents (the "**Participant Register**"). Lender shall not have any obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. Notwithstanding the foregoing, so long as no Event of Default shall have occurred and is continuing, Lender shall not assign its interest in the Loan Documents to any Person who is a Disqualified Institution. Each Borrower agrees that each participant shall be entitled to the benefits of Section 2.7 (subject to the requirements and limitations therein, including the requirements under Sections 2.7(e) and 2.7(f) (it being understood that the documentation required under Section 2.7(e) shall be delivered to the participating Lender and the information and documentation required under Section 2.7(f) will be delivered to Borrower Representative)) to the same extent as if it were Lender and had acquired its interest by assignment; provided that such participant shall not be entitled to receive any greater payment under Section 2.7 with respect to any participation than its participating Lender would have been entitled to receive

13.3 Indemnification. Each Loan Party agrees to indemnify, defend and hold Lender and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Lender (each, an "**Indemnified Person**") harmless against: (a) all obligations, demands, claims, and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort) (collectively, "**Claims**") claimed or asserted by any other party in connection with, relating to, following from or arising from, out of or under the transactions contemplated by the Loan Documents; and (b) all losses, liabilities, costs or expenses (including Lender Expenses) in any way suffered, incurred, or paid by such Indemnified Person in connection with, relating to, following from, or arising from, out of or under the transactions among or between Lender and Loan Parties, or any of them (including reasonable attorneys' fees and expenses), except for Claims and/or losses to the extent directly caused by such Indemnified Person's gross negligence or willful misconduct. Each Loan Party hereby further indemnifies, defends and holds each Indemnified Person harmless from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements of any kind or nature whatsoever (including the reasonable fees and disbursements of counsel for such Indemnified Person) in connection with any investigative, response, remedial, administrative or judicial matter or proceeding, whether or not such Indemnified Person shall be designated a party thereto and including any such proceeding initiated by or on behalf of any Loan Party, and the reasonable expenses of investigation by engineers, environmental consultants and similar technical personnel and any commission, fee or compensation claimed by any broker (other than any broker retained by Lender) asserting any right to payment for the transactions contemplated hereby which may be imposed on, incurred by or asserted against such Indemnified Person as a result of or in connection with the transactions contemplated hereby and the use or intended use of the proceeds of the loan proceeds except for liabilities, obligations, losses, damages, penalties, actions, judgments, suits, claims, costs, expenses and disbursements directly caused by such Indemnified Person's gross negligence or willful misconduct. This Section 13.3 shall not apply with respect to Taxes other than any taxes that represent Claims arising from any non-Tax Claim and shall survive until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run.

13.4 Borrower Liability. If any Person is named as, or joined to this Agreement as, a Borrower, the following provisions shall apply: any Borrower may, acting singly, request Credit Extensions hereunder. Each Borrower hereby appoints the others as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions hereunder. Each Borrower hereunder shall be jointly and severally obligated to repay all Credit Extensions made hereunder, regardless of which Borrower actually receives said Credit Extension, as if each Borrower hereunder directly received all Credit Extensions. Each Borrower waives (a) any suretyship defenses available to it under the Code or any other applicable law and (b) any right to require Lender to: (i) proceed against any Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Lender may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Borrower's liability. Notwithstanding any other provision of this Agreement or other related document, each Borrower irrevocably waives all rights that it may have at law or in equity (including any law subrogating such Borrower to the rights of Lender under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by such Borrower with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by such Borrower with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section 13.4 shall be null and void. If any payment is made to a Borrower in contravention of this Section 13.4, such Borrower shall hold such payment in trust for Lender and such payment shall be promptly delivered to Lender for application to the Obligations, whether matured or unmatured.

13.5 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

13.6 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

13.7 Correction of Loan Documents. Lender may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties.

13.8 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations among the parties about the subject matter of the Loan Documents merge into the Loan Documents.

13.9 Counterparts; Electronic Execution of Documents. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed counterpart of a signature page of any Loan Document by electronic means shall be effective as delivery of an original executed counterpart of such Loan Document. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures (including in .pdf format) or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including any state law based on the Uniform Electronic Transactions Act.

13.10 Confidentiality. In handling any confidential information, Lender shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Lender's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Lender, collectively, "**Lender Entities**") or in connection with Lender's own financing or securitization transactions and upon the occurrence of a default, event

of default or similar occurrence with respect to such financing or securitization transaction, it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such information confidential; (b) to prospective transferees or purchasers of any interest in the Credit Extensions (subject to an agreement containing provisions substantially the same as those of this Section 13.10); (c) as required by law, regulation, subpoena, or other order and in connection with reporting obligations applicable to Lender, including pursuant to the Securities Exchange Act of 1934, as amended; (d) to Lender's regulators or as otherwise required in connection with Lender's examination or audit; (e) as Lender considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Lender so long as such service providers have executed a confidentiality agreement with Lender with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Lender's possession when disclosed to Lender, or becomes part of the public domain (other than as a result of its disclosure by Lender in violation of this Agreement) after disclosure to Lender; or (ii) disclosed to Lender by a third party, if Lender does not know that the third party is prohibited from disclosing the information. Lender Entities may use a Loan Party's name and logo, and include a brief description of the relationship among Loan Parties and Lender, in Lender's marketing materials. Lender may use confidential information for the development of databases, reporting purposes, and market analysis so long as such confidential information is aggregated and anonymized prior to distribution, and Lender has ownership of the information and analysis so developed. The provisions of this Section 13.10 shall survive the termination of this Agreement.

13.11 Borrower Representative. Each Borrower hereby appoints Borrower Representative to act as its exclusive agent for all purposes under the Loan Documents (including with respect to all matters related to the borrowing and repayment of any Credit Extension). Each Borrower acknowledges and agrees that (a) Borrower Representative may execute such documents on behalf of any Borrower as Borrower Representative deems appropriate in its sole discretion and each Borrower shall be bound by and obligated by all of the terms of any such document executed by Borrower Representative on its behalf, (b) any notice or other communication delivered by Lender hereunder to Borrower Representative shall be deemed to have been delivered to each Borrower and (c) the Lender shall accept (and shall be permitted to rely on) any document or agreement executed by Borrower Representative on behalf of Borrowers (or any of them). Each Borrower must act through the Borrower Representative for all purposes under this Agreement and the other Loan Documents. Notwithstanding anything contained herein to the contrary, to the extent any provision in this Agreement requires any Borrower to interact in any manner with Lender, such Borrower shall do so through Borrower Representative.

13.12 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

13.13 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

13.14 Publicity; Press Releases. Loan Parties agree that Lender may issue a press release announcing the financing pursuant to this Agreement and may display any Loan Party's logo on its website and other marketing materials consistent with Lender's practices with respect to its loan portfolio.

13.15 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

13.16 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Closing Date.

LENDER:

CANADIAN IMPERIAL BANK OF COMMERCE

By: /s/Mark Usher
Name: Mark Usher
Title: Authorized Signatory

By: /s/Imran Premii
Name: Imran Premii
Title: Authorized Signatory

BORROWER:

PULMONX CORPORATION

By: /s/ Derrick Sung
Name: Derrick Sung, Ph.D.
Title: Chief Financial Officer

EXHIBIT A

DEFINITIONS

As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" means any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes all accounts receivable and other sums owing to a Loan Party.

"**Account Control Agreement**" means any control agreement entered into among the depository institution at which a Loan Party maintains a Deposit Account or the securities intermediary or commodity intermediary at which a Borrower or any other Loan Party maintains a Securities Account or a Commodity Account, a Loan Party, and Lender pursuant to which Lender obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

"**Account Debtor**" means any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Adjusted EBITDA**" means, for the most-recently completed three-month period, (a) Net Income, plus (b) Interest Expense, plus (c) to the extent deducted in the calculation of Net Income, depreciation expense and amortization expense of Borrowers and their Subsidiaries, plus (d) income tax expense of Borrowers and their Subsidiaries, plus (e) stock base compensation expense of Borrowers and their Subsidiaries, minus (f) software and research and development expenses capitalized by Borrowers and their Subsidiaries, minus (g) lease payments that would otherwise have been an operating expense pursuant to International Financial Reporting Standard 16 (as in effect on the Closing Date), in each case, as determined in accordance with GAAP.

"**Affiliate**" means, with respect to any Person, each other Person that owns or controls, directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agreement**" has the meaning set forth in the preamble.

"**Amortization Date**" means February 20, 2022; provided that such date shall be extended to February 20, 2023, at the option of Borrowers, upon Borrower Representative's written notification to Lender received on or before February 20, 2022 of Borrowers' election to extend such date, so long as (i) no Event of Default has occurred and is continuing and (ii) on and as of February 20, 2022, Borrowers shall have achieved $20,000,000 of Revenue for the trailing three month period as of February 20, 2022.

"**Amortization Schedule**" means an amortization schedule of 36 months, unless the Amortization Date has been extended to February 20, 2023, in which case, the Amortization Schedule shall mean an amortization schedule of 24 months.

"**Annual Projections**" has the meaning set forth in Section 6.2(c).

"**Anti-Terrorism Laws**" are any laws relating to terrorism or money laundering, including the Anti-Terrorism Order, the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"**Anti-Terrorism Order**" means Executive Order No. 13,224 as of September 24, 2001, Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit or Support Terrorism, 66 U.S. Fed. Reg. 49,079 (2001), as amended.

"**Blocked Person**" is any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, the Anti-Terrorism Order, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, the Anti-Terrorism Order, (c) a Person with which Lender is

prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in the Anti-Terrorism Order, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"**Board**" means, with respect to any Person, the board of directors, board of managers, managers or other similar bodies or authorities performing similar governing functions for such Person.

"**Borrower**" and "**Borrowers**" have the meaning set forth in the preamble.

"**Borrower Representative**" means Pulmonx.

"**Business Day**" means any day that is not a Saturday, Sunday or a day on which commercial banks in the State of New York or the Province of Ontario are required or permitted to be closed.

"**Capital Expenditures**" means expenditures in respect of the purchase, lease, license, acquisition, installation, erection, development, improvement, maintenance or construction of capital assets or software which are required to be capitalized in accordance with GAAP.

"**Cash Equivalents**" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one year from the date of acquisition; (b) commercial paper maturing no more than one year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc.; (c) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein; and (d) money market funds at least 95.00% of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

"**Change in Control**" means any of the following (or any combination of the following) whether arising from any single transaction event or series of related transactions or events that, individually or in the aggregate, result in: (a) the holders of Borrower Representative's Equity Interests who were holders of Equity Interest as of the Closing Date, ceasing to own at least 51.00% of the Voting Stock of Borrower Representative, except as a result of an initial public offering or a bona fide equity financing or series of financings from investors reasonably acceptable to Lender; (b) any "person" or "group" (within the meaning of Section 13(d) and 14(d)(2) of the Securities Exchange Act of 1934) becoming the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of a sufficient number of Equity Interests of Borrower Representative ordinarily entitled to vote in the election of directors, empowering such "person" or "group" to elect a majority of the members of the Board of Borrower Representative, who did not have such power before such transaction, except as a result of an initial public offering or a bona fide equity financing or series of financings from investors reasonably acceptable to Lender; or (c) the Transfer of all or substantially all assets of Loan Parties or of a material business line of Loan Parties; or (d) Borrower Representative ceasing to own and control, free and clear of any Liens (other than Permitted Liens), directly or indirectly, all of the Equity Interests in each of its Subsidiaries or failing to have the power to direct or cause the direction of the management and policies of each such Subsidiary.

"**Claims**" has the meaning set forth in Section 13.3.

"**Closing Date**" has the meaning set forth in the preamble.

"**Code**" means the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of New York; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided, further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Lender's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of New York, the term "**Code**" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction

solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" means any and all properties, rights and assets of any Loan Party described on Exhibit B, and any collateral securing the Obligations pursuant to any guaranty or pursuant to any other Loan Document.

"**Collateral Access Agreement**" means an agreement with respect to a Loan Party's leased location or bailee location, in each case in form and substance reasonably satisfactory to Lender.

"**Collateral Account**" means any Deposit Account, Securities Account, or Commodity Account of a Loan Party, other than Excluded Accounts.

"**Commodity Account**" means any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Competitor**" means any Person that is direct competitor of any Borrower or any of its Subsidiaries, as determined by the Board of Borrower Representative in its reasonable discretion.

"**Compliance Certificate**" means that certain certificate in the form attached hereto as Exhibit D.

"**Contingent Obligation**" means, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the Ordinary Course of Business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Copyrights**" means any and all copyright rights, copyright applications, copyright registrations and like protections of a Person in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Credit Extension**" means the Term Loans or any other extension of credit by Lender for Borrowers' benefit.

"**Default**" means any circumstance, event or condition that constitutes an Event of Default or that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

"**Default Rate**" has the meaning set forth in Section 2.4(b).

"**Deposit Account**" means any "deposit account" as defined in the Code with such additions to such term as may hereafter be made, and includes any checking account, savings account or certificate of deposit.

"**Disqualified Institution**" means, on any date, any Person that is a Competitor, which Person has been designated by Borrowers as a "Disqualified Institution" by written notice to Lender not less than five Business Days prior to such date, including those Persons listed on Schedule 1; provided that the term "Disqualified Institutions" shall exclude any Person that Borrowers have designated as no longer being a "Disqualified Institution" by written notice delivered to Lender from time to time; and provided, further, that no Person shall be or constitute, or may be designated by Borrowers as, a "Disqualified Institution" if an Event of Default has occurred and is continuing.

"**Dollars**," "**dollars**" or use of the sign "**$**" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "$" sign to denote its currency or may be readily converted into lawful money of the United States.

"**Domestic Subsidiary**" means any Subsidiary organized under the laws of any political subdivision of the United States.

"**Equipment**" means all "equipment" as defined in the Code with such additions to such term as may hereafter be made, and includes all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**Equity Interests**" means, with respect to any Person, any of the shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership, membership or profit interests in) such Person, any of the securities convertible into or exchangeable for shares of capital stock of (or other ownership, membership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and any of the other ownership, membership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding on any date of determination.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, and its regulations.

"**Event of Default**" has the meaning set forth in Section 8.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

"**Excluded Accounts**" has the meaning set forth in Section 6.6(b).

"**Excluded Locations**" means the following locations where Collateral may be located from time to time: (a) locations where only mobile office equipment (e.g. laptops, mobile phones and the like) may be located with employees in the Ordinary Course of Business, and (b) any other location where Collateral with an aggregate value of less than $250,000 is located.

"**Excluded Taxe**s" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Recipient, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) United States federal withholding Taxes imposed on amounts payable to or for the account of such Recipient with respect to an applicable interest in a Credit Extension pursuant to a law in effect on the date on which (i) such Recipient acquires such interest in any Credit Extension or (ii) such Recipient changes its lending office, except in each case to the extent that, pursuant to Section 2.7, amounts with respect to such Taxes were payable either to such Recipient's assignor immediately before such Recipient acquired the applicable interest in a Credit Extension or to such Recipient immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.7(e) and (d) any withholding Taxes imposed under FATCA.

"**FATCA**" means Sections 1471 through 1474 of the IRC as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreement entered into pursuant to Section 1471(b)(1) of the IRC and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Authorities and implementing such Sections of the IRC.

"**Federal Reserve Board**" means the Board of Governors of the Federal Reserve System, or any successor thereto.

"**Foreign Recipient**" means a Lender that is not a U.S. Person.

"**Foreign Subsidiary**" means any Subsidiary that is not a Domestic Subsidiary.

"**Funding Date**" means any date on which a Credit Extension is made to or for the account of a Borrower which shall be a Business Day.

"**GAAP**" means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination, provided, however, that if there occurs after the Closing Date any change in GAAP that affects in any respect the calculation of any covenant or threshold in this Agreement, Lender and Borrowers shall negotiate in good faith amendments to the provisions of this Agreement that relate to the calculation of such covenant or threshold with the intent of having the respective positions of Lender and Borrowers after such change in GAAP conform as nearly as possible to their respective positions as of the Closing Date, and, until any such amendments have been agreed upon, such covenants and thresholds shall be calculated as if no such change in GAAP has occurred, provided, further, that no effect shall be given to Accounting Standards Codification 842, Leases (or any other Accounting Standards Codification having similar result or effect) (and related interpretations) to the extent any lease (or similar arrangement) would be required to be treated as a capital lease thereunder where such lease (or arrangement) would have been treated as an operating lease under GAAP as in effect immediately prior to the effectiveness of such Accounting Standards Codification.

"**General Intangibles**" means all "general intangibles" as defined in the Code in effect on the Closing Date with such additions to such term as may hereafter be made, and includes all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Approval**" means any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" means any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central Lender or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" means any Person providing a Guaranty in favor of Lender or providing collateral, security or other credit support for all or any portion of the Obligations.

"**Guaranty**" means any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"**Indebtedness**" means (a) indebtedness for borrowed money or the deferred price of property or services, (b) any reimbursement and other obligations for surety bonds and letters of credit, (c) obligations evidenced by notes, bonds, debentures or similar instruments, (d) capital lease obligations, and (e) Contingent Obligations.

"**Indemnified Person**" has the meaning set forth in Section 13.3.

"**Indemnified Taxes**" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in the foregoing clause (a), Other Taxes.

"**Insolvency Proceeding**" means any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means, with respect to any Loan Party (or, as applicable, any of its Subsidiaries), all of such Loan Party's or Subsidiary's right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to such Person;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Interest Expense**" means for any fiscal period, interest expense (whether cash or non-cash) determined in accordance with GAAP for the relevant period ending on such date, including, in any event, interest expense with respect to any Credit Extension and other Indebtedness of Borrowers and their Subsidiaries, including or duplication, all commissions, discounts, or related amortization and other fees and charges with respect to letters of credit and bankers' acceptance financing and the net costs associated with interest rate swap, cap, and similar arrangements, and the interest portion of any deferred payment obligation (including leases of all types).

"**Inventory**" means all "inventory" as defined in the Code in effect on the Closing Date with such additions to such term as may hereafter be made.

"**Investment**" means any beneficial ownership interest in any Person (including stock, partnership interest or other securities or Equity Interests), and any loan, advance or capital contribution to any Person, or the acquisition of all or substantially all of the assets or properties of another Person.

"**IP Security Agreement**" means that certain intellectual property security agreement entered into by each Loan Party which is the owner of Intellectual Property registered with the United States Patent and Trademark Office or United States Copyright Office and Lender as of the Closing Date, as amended, restated, supplemented or otherwise modified, from time to time.

"**IRC**" means the U.S. Internal Revenue Code of 1986, as amended.

"**IRS**" means the U.S. Internal Revenue Service.

"**Key Person**" means the Chief Executive Officer and Chief Financial Officer of Borrower Representative.

"**Lead Investor**" means an investor in Pulmonx specified to Lender by Borrower Representative in writing from time to time, which Lead Investor shall be reasonably satisfactory to Lender.

"**Lender**" has the meaning set forth in the preamble.

"**Lender Entities**" has the meaning set forth in Section 13.10.

"**Lender Expenses**" means all audit fees and expenses, costs, and expenses (including reasonable and documented attorneys' fees and expenses as well as appraisal fees, fees incurred on account of lien searches, inspection fees and filing fees) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to a Loan Party or the Loan Documents.

"**Lien**" means a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"**Loan Documents**" means, collectively, this Agreement, any schedules, exhibits, certificates, notices and any other documents related to this Agreement, the Swiss Share Pledge Documents, the Account Control Agreements, the Collateral Access Agreements, any note, or notes or guaranties executed by a Loan Party, and any other present or future agreement by a Loan Party with or for the benefit of Lender in connection with this Agreement, all as amended, modified, supplemented, extended or restated from time to time.

"**Loan Parties' Books**" are all of each Loan Party's books and records including ledgers, federal and state tax returns, records regarding such Loan Party's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Loan Party**" or "**Loan Parties**" means, each Borrower and each Guarantor, if any, from time to time party hereto.

"**Loan Request**" means a request for a Credit Extension pursuant to this Agreement in substantially the form attached hereto as Exhibit C.

"**Margin Stock**" has the meaning set forth in Section 5.10(b).

"**Material Adverse Effect**" means (a) a material impairment in the perfection or priority of Lender's Lien in the Collateral or in the value of the Collateral or (b) a material adverse effect upon: (i) the business, operations, or condition (financial or otherwise) of a Loan Party; or (ii) the prospect of repayment of any part of the Obligations.

"**Material Subsidiary**" means any Foreign Subsidiary (other than Pulmonx Switzerland) that is not a Loan Party that (a) maintains (i) cash and other assets with an aggregate value in excess of 5.00% of the aggregate value of the assets of Borrower and its Subsidiaries, (ii) any Intellectual Property which is material to the business of Loan Parties as a whole or (iii) any contracts which are material to the business of Loan Parties as a whole or (b) generates revenue in excess of 5.00% of the aggregate revenue generated by Borrower and its Subsidiaries for any 12-month period then ended.

"**Maximum Rate**" has the meaning set forth in Section 2.4(e).

"**Net Income**" means, for any period as at any date of determination, the net profit (or loss), after provision for taxes, of Borrowers and their Subsidiaries for such period taken as a single accounting period.

"**Obligations**" means all of each Borrower's and each other Loan Party's obligations to pay the Term Loans and the amounts when due, any debts, principal, interest, fees, Lender Expenses and other amounts any Borrower or any Loan Party owes to Lender or an Affiliate thereof now or later, whether under this Agreement, the other Loan Documents, or otherwise, including interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of any Borrower or any other Loan Party assigned to Lender, and to perform such Borrower's or such Loan Party's duties under the Loan Documents.

"**OFAC**" has the meaning set forth in Section 5.10(c).

"**OFAC Lists**" are, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to the Anti-Terrorism Order and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"**Operating Documents**" means, for any Person, such Person's formation documents, as certified by the Secretary of State (or equivalent agency) of such Person's jurisdiction of formation, organization or incorporation on a date that is no earlier than 30 days prior to the Closing Date and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement or operating agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments, restatements and modifications thereto.

"**Ordinary Course of Business**" means, in respect of any transaction involving any Person, the ordinary course of such Person's business as conducted by any such Person in accordance with (a) the usual and customary customs and practices in the kind of business in which such Person is engaged, and (b) the past practice and operations of such Person, and in each case, undertaken by such Person in good faith and not for purposes of evading any covenant or restriction in any Loan Document.

"**Other Connection Taxes**" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Taxes (other than a connection arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to, or enforced, any Loan Document, or sold or assigned an interest in any Credit Extension or any Loan Document).

"**Other Taxes**" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"**Participant Register**" has the meaning set forth in Section 13.2.

"**Patents**" means all patents, patent applications and like protections of a Person including improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same and all rights therein provided by international treaties or conventions.

"**Perfection Certificate**" has the meaning set forth in Section 5.1(a).

"**Permitted Indebtedness**" means:

(a) each Loan Party's Indebtedness to Lender under this Agreement and the other Loan Documents including with respect to letters of credit, banker's acceptances and bank guaranties;

(b) Indebtedness consisting of capitalized lease obligations and purchase money Indebtedness, in each case incurred by any Loan Party or any of their Subsidiaries to finance the acquisition, repair, improvement or construction of fixed or capital assets of such person, provided that (i) the aggregate outstanding principal amount of all such Indebtedness does not exceed $250,000 at any time and (ii) the principal amount of such Indebtedness does not exceed the lower of the cost or fair market value of the property so acquired or built or of such repairs or improvements financed with such Indebtedness (each measured at the time of such acquisition, repair, improvement or construction is made);

(c) unsecured Indebtedness to trade creditors incurred in the Ordinary Course of Business;

(d) Indebtedness incurred as a result of endorsing negotiable instruments received in the Ordinary Course of Business;

(e) excluding Indebtedness described in clauses (b) or (c) above and listed in the Perfection Certificate, Indebtedness existing on the Closing Date as shown on the Perfection Certificate;

(f) Subordinated Debt;

(g) Indebtedness in an aggregate amount not to exceed $250,000 in respect of any cash management services, netting services, automatic clearinghouse arrangements, overdraft protections, employee credit card programs and other cash management and similar arrangements in the Ordinary Course of Business and any guarantees thereof;

(h) guarantees by a Loan Party or any of their Subsidiaries in respect of (i) Indebtedness of such Loan Party or any of its Subsidiaries permitted hereunder and (ii) obligations that do not constitute Indebtedness;

(i) Indebtedness in an aggregate amount not to exceed $500,000 incurred by a Loan Party in respect of letters of credit, bank guarantees, bankers' acceptances, warehouse receipts or similar instruments issued or created in the Ordinary Course of Business;

(j) Indebtedness incurred in connection with the financing of insurance premiums in the Ordinary Course of Business; and

(k) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness described in clauses (b) through (k) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon a Borrower or any of its Subsidiaries, as the case may be.

"**Permitted Investments**" means:

(a) Investments (including Subsidiaries) existing on the Closing Date and shown on the Perfection Certificate;

(b) (i) Investments consisting of Cash Equivalents, and (ii) any Investments permitted by Borrower Representative's investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Lender;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the Ordinary Course of Business of a Loan Party;

(d) subject to Section 6.15, Investments consisting of Deposit Accounts in which Lender has, to the extent required by Section 6.6(b), a perfected security interest;

(e) Investments in connection with Permitted Transfers;

(f) (i) Investments of cash and Cash Equivalents by Borrower Representative in an aggregate amount not to exceed $1,000,000 in any fiscal year in any of its Subsidiaries; (ii) Investments by any of Borrower Representative's Subsidiaries that are not Loan Parties in any of Borrower Representative's Subsidiaries; (iii) Investments by Subsidiaries in Borrower Representative; and (iv) non-cash Investments by Borrower Representative in its Subsidiaries;

(g) Investments not to exceed $250,000 outstanding in the aggregate at any time consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the Ordinary Course of Business, and (ii) non-cash loans to employees, officers or directors relating to the purchase of Equity Interests of Borrower Representative pursuant to employee stock purchase plans or other similar agreements approved by Borrower Representative's Board;

(h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the Ordinary Course of Business;

(i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the Ordinary Course of Business; provided that this clause (i) shall not apply to Investments of a Loan Party in any Subsidiary;

(j) Investments consisting of the creation of a Subsidiary for the purpose of consummating a merger transaction permitted by Section 7.3 of this Agreement, which is otherwise a Permitted Investment;

(k) Investments of any Person that becomes a Subsidiary after the date hereof, provided that such Investments exist at the time such Person becomes a Subsidiary and were not made in anticipation of such Person becoming a Subsidiary;

(l) non-cash Investments in joint ventures or strategic alliances in the Ordinary Course of Business of Borrower Representative consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support; and

(m) Investments consisting of Cash Equivalents at Foreign Subsidiaries to the extent permitted by Section 7.12(a).

"**Permitted Licenses**" are (a) licenses of over-the-counter software that is commercially available to the public, and (b) non-exclusive and exclusive licenses for the use of the Intellectual Property of any Loan Party or any of its Subsidiaries entered into in the Ordinary Course of Business, provided, that, with respect to each such license described in clause (b), (i) no Event of Default has occurred or is continuing at the time of such license; (ii) the license constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment of any Intellectual Property and do not restrict the ability of such Loan Party or any of its Subsidiaries, as applicable, to pledge, grant a security interest in or lien on, or assign or otherwise Transfer any Intellectual Property; (iii) in the case of any exclusive license, (A) such Loan Party delivers 10 days' prior written notice and a brief summary of the terms of the proposed license to Lender and delivers to Lender copies of the final executed licensing documents in connection with the exclusive license promptly upon consummation thereof, and (B) any such license could not result in a legal transfer of title of the licensed property but may be exclusive in respects other than territory and may be exclusive as to territory only as to discrete geographical areas outside of the United States; and (iv) all upfront payments, royalties, milestone payments or other proceeds arising from the licensing agreement that are payable to such Loan Party or any of its Subsidiaries are paid to a Collateral Account.

"**Permitted Liens**" means:

(a) Liens arising under this Agreement and the other Loan Documents;

(b) Liens securing Indebtedness permitted under clause (e) of the definition of Permitted Indebtedness, provided that (i) such Liens exist prior to the acquisition of, or attach substantially simultaneous with, or within twenty (20) days after the, acquisition, lease, repair, improvement or construction of, such property financed or leased by such Indebtedness and (ii) such Liens do not extend to any property of a Loan Party other than the property (and proceeds thereof) acquired, leased or built, or the improvements or repairs, financed by such Indebtedness;

(c) Liens for taxes, fees, assessments or other government charges or levies, either (i) not yet delinquent or (ii) being contested in good faith and for which such Loan Party or Subsidiary maintains adequate reserves on its books;

(d) leases or subleases of real property granted in the Ordinary Course of Business of such Person, and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the Ordinary Course of Business of such Person, if the leases, subleases, licenses and sublicenses do not prohibit granting Lender a security interest therein;

(e) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the Ordinary Course of Business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed $50,000 and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(f) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the Ordinary Course of Business (other than Liens imposed by ERISA);

(g) deposits or pledges of cash to secure bids, tenders, contracts, leases (other than contracts or leases for the payment of money), surety and appeal bonds and other obligations of a like nature arising, in each case, in the Ordinary Course of Business;

(h) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default;

(i) Liens in favor of other financial institutions arising in connection with a Deposit Account or Securities Account of a Loan Party or Subsidiary thereof held at such institutions solely to secure payment of fees and similar costs and expenses, provided that Lender has a perfected security interest in each such Deposit Account or Securities Account of a Loan Party, and Lender has received an Account Control Agreement with respect thereto to the extent required pursuant to Section 6.6;

(j) Liens consisting of Permitted Licenses;

(k) excluding Liens described in clause (b) above and listed in the Perfection Certificate, Liens existing on the Closing Date as shown on the Perfection Certificate;

(l) Liens on cash and Cash Equivalents securing reimbursement obligations in respect of letter of credit permitted under clause (i) of the definition of Permitted Indebtedness;

(m) Liens on property of a Person existing at the time such Person is acquired by, merged into or consolidated with Borrower or any Subsidiary or becomes a Subsidiary, provided that (i) such Liens were not created in contemplation of such acquisition, merger, consolidation or Investment, (ii) such Liens do not extend to any assets other than those of such Person and (iii) any Indebtedness secured by such Liens constitutes Permitted Indebtedness; and

(n) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in clauses (b) and (k) above, but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase.

"**Permitted Transfers**" means (a) sales of Inventory by a Loan Party or any of its Subsidiaries in the Ordinary Course of Business, (b) Permitted Licenses, (c) Transfers consisting of the granting of Permitted Liens and the making of Permitted Investments, (d) Transfers of worn out, surplus or obsolete Equipment, (e) the use or transfer of money or Cash Equivalents in the Ordinary Course of Business for the payment of ordinary course business expenses in a manner that is not prohibited by the Loan Documents, (f) the sale or issuance of any stock of Borrower Representative to the extent not prohibited by the definition of Change in Control or Section 7.2, (g) Transfers of property to the extent that such property is exchanged for credit against the purchase price of similar replacement property or the proceeds of such Transfer are promptly applied to the purchase price of such replacement property and (h) the payment to Oxford Finance LLC of the Success Fee, so long as such payment is funded solely from the proceeds of an initial public offering of Borrower Representative's common stock.

"**Person**" means any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Prime Rate**" is the rate of interest per annum from time to time published in the money rates section of The Wall Street Journal or any successor publication thereto as the "prime rate" then in effect; provided that if such rate of interest, as set forth from time to time in the money rates section of The Wall Street Journal, becomes unavailable for any reason as determined by Lender, the "Prime Rate" shall mean the rate of interest per annum announced by Lender as its prime rate in effect at its principal office in the State of New York (such Lender announced Prime Rate not being intended to be the lowest rate of interest charged by Lender in connection with extensions of credit to debtors).

"**Pulmonx**" has the meaning set forth in the preamble.

"**Pulmonx Switzerland**" means PulmonX International Sàrl, a limited liability company (*société à responsabilité limitée*) formed under the laws of Switzerland.

"**Recipient**" means, as applicable, (a) Lender, (b) any successor thereof and (c) any assignee thereof as provided in Section 13.2, or any combination thereof (as the context requires).

"**Register**" has the meaning set forth in Section 2.7(g).

"**Registered Organization**" means any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"**Requirement of Law**" means as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Responsible Officer**" means with respect to any Person, any of the Chief Executive Officer, President or Chief Financial Officer of such Person. Unless the context otherwise requires, each reference to a Responsible Officer herein shall be a reference to a Responsible Officer of Borrower Representative.

"**Restricted License**" means any material license or other material agreement (other than ordinary course customer contracts, off the shelf software licenses, licenses that are commercially available to the public, and open source licenses) with respect to which a Loan Party or any of its Subsidiaries is the licensee (a) that prohibits or otherwise restricts such Loan Party or Subsidiary from granting a security interest in such Loan Party or Subsidiary's interest in such license or agreement or any other property, or (b) for which a default under, or termination of which, could reasonably be expected to interfere with the Lender's right to sell any Collateral.

"**Revenue**" means, with respect to any period, the consolidated revenue generated by Borrowers and their Subsidiaries during such period, as determined in accordance with GAAP.

"**Securities Account**" means any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"Security Instrument" means any security agreement, assignment, pledge agreement, financing or other similar statement or notice, continuation statement, other agreement or instrument, or any amendment or supplement to any thereof, creating, governing or providing for, evidencing or perfecting any security interest or Lien.

"**Shares**" means one hundred percent (100%) of the issued and outstanding Equity Interests owned or held of record by a Loan Party in any other Loan Party or any Subsidiary.

"**Subordinated Debt**" means Indebtedness incurred by a Loan Party that is subordinated in writing to all of the Obligations pursuant to a Subordination Agreement.

"**Subordination Agreement**" means any subordination, intercreditor or other similar agreement in form and substance satisfactory to Lender entered into between Lender and the other creditor, on terms acceptable to Lender, including lien and payment subordination.

"**Subsidiary**" means, with respect to any Person, any corporation, partnership, limited liability company or joint venture in which (a) any general partnership interest or (b) more than 50.00% of the stock, limited liability company interest, joint venture interest or other Equity Interest of which by the terms thereof has the ordinary voting power to elect the Board of that Person, at the time as of which any determination is being made, is owned or controlled by such Person, either directly or through an Affiliate. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of a Borrower.

"**Success Fee**" means the "Success Fee" as defined and described in that certain Success Fee Agreement dated as of August 28, 2014, between Borrower and Oxford Finance LLC, a true and correct copy of which was delivered by Borrower to Lender prior to the Closing Date.

"**Swiss Security Conditions**" means Lender shall have received from Borrower (a) certified copies of the articles of association and a certified excerpt of the Commercial Register for Pulmonx Switzerland and (b) a joinder to this Agreement pursuant to which Pulmonx Switzerland becomes a Borrower or Guarantor hereunder and grants a security interest in and to the assets of Pulmonx Switzerland (substantially as described on Exhibit B), together with

such other documents, instruments and agreements reasonably requested by Lender, all in form and substance satisfactory to Lender (including being sufficient to grant Lender a first priority Lien, subject to Permitted Liens that are permitted pursuant to the terms of this Agreement to have superior priority to Lender's Lien under this Agreement, in and to the assets of Pulmonx Switzerland). Any document, agreement, or instrument executed or issued pursuant to the Swiss Security Conditions shall be a Loan Document.

"**Swiss Share Pledge Documents**" means a Pledge Agreement, in form and substance reasonably satisfactory to Lender, entered into by Borrower in favor of Lender with respect to the Equity Interests of Pulmonx Switzerland, together with all other documents, instruments and other agreements entered into in connection therewith as reasonably required by Lender.

"**Taxes**" means any and all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), value added taxes, or any other goods and services, use or sales taxes, assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

"**Term A Loan**" has the meaning set forth in Section 2.3(a)(i).

"**Term A Loan Amount**" means $17,000,000.

"**Term B Loan**" and "**Term B Loans**" have the meaning set forth in Section 2.3(a)(ii).

"**Term B Loan Amount**" means $8,000,000.

"**Term C Loan**" and "**Term C Loans**" have the meaning set forth in Section 2.3(a)(iii).

"**Term C Loan Amount**" means $7,000,000.

"**Term Loan**" and "**Term Loans**" have the meaning set forth in Section 2.3(a)(iii).

"**Term Loan Maturity Date**" means February 20, 2025.

"**Trademarks**" means any trademark and servicemark rights of a Person, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business connected with and symbolized by such trademarks.

"**Transfer**" means defined in Section 7.1.

"**UFCA**" has the meaning set forth in Section 12.15(b).

"**UFTA**" has the meaning set forth in Section 12.15(b).

"**United States**" means United States of America.

"**Unrestricted Cash**" means the result of (i) all unrestricted cash of Borrowers in a Deposit Account subject to an Account Control Agreement or maintained with Lender or an Affiliate of Lender, minus (ii) all outstanding checks written by Borrowers that have not been cashed or otherwise processed.

"**U.S. Person**" means any Person that is a "United States Person" as defined in Section 7701(a)(30) of the IRC.

"**U.S. Tax Compliance Certificate**" has the meaning set forth in Section 2.7(e)(ii)(B)(3).

"**Voting Stock**" means, with respect to any Person, all classes of Equity Interests issued by such Person the holders of which are ordinarily, in the absence of contingencies, entitled to vote for the election of directors or managers (or Persons performing similar functions) of such Person, even though the right so to vote has been suspended by the happening of such a contingency.

EXHIBIT B

COLLATERAL DESCRIPTION

The Collateral consists of all of each Loan Party's right, title and interest in and to all of its personal property wherever located, whether now owned or existing or hereafter acquired, created or arising, including the following:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles, commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and all such Loan Party's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds (both cash and non-cash) and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the "Collateral" does not include any of the following, whether now owned or hereafter acquired: (a) any intent-to-use US trademark application for which an amendment to allege use or statement of use has not been filed and accepted by the US Patent and Trademark Office and that would otherwise be deemed invalidated, cancelled or abandoned due to the grant of a security interest thereon (provided that each intent-to-use application shall be considered Collateral immediately and automatically upon such filing and acceptance); and (b) any lease, license, contract, permit, letter of credit, purchase money arrangement, instrument or agreement to which any Loan Party is a party (including any of its rights or interests thereunder) if and to the extent that the grant of such security interest shall constitute or result in (i) the abandonment, invalidation or unenforceability of any right, title or interest of such Loan Party therein or (ii) result in a breach or termination pursuant to the terms of, or default under, any such lease, license, contract, permit, letter of credit, purchase money agreement, instrument or agreement; provided that the foregoing exclusion shall in no way be construed (x) to apply if any such restriction or prohibition is unenforceable or rendered ineffective under Sections 9-406, 9-407 or 9-408 of the UCC or under other applicable law, (y) so as to limit, impair or otherwise affect Lender's continuing security interests in and liens upon any rights or interests of any Loan Party in or to (i) monies due or to become due under any such lease, license, contract, permit, letter of credit, purchase money arrangement, instrument or agreement (including any Accounts) or (ii) any proceeds from disposition of any such lease, license, contract, permit, letter of credit, purchase money arrangement, instrument or agreement, or (z) to apply to the extent that any consent or waiver has been obtained that would permit the security interest of lien notwithstanding the applicable restriction or prohibition.

EXHIBIT C

LOAN REQUEST

Canadian Imperial Bank of Commerce
Credit Processing Services
595 Bay Street, 5th floor
Toronto, Ontario
M5G 2C2
e-mail: [Email Address Intentionally Omitted]
Attention: Gregory McDonald

Date: _____

Ladies and Gentleman:

The undersigned, a Responsible Officer of Pulmonx Corporation, a Delaware corporation ("**Borrower Representative**"), refers to that certain Loan and Security Agreement, dated as of February 20, 2020 (as amended, restated, supplemented or otherwise modified, from time to time, the "**Agreement**"), among CANADIAN IMPERIAL BANK OF COMMERCE ("**Lender**"), Borrower Representative, each other Person party thereto as a borrower from time to time (collectively, "**Borrowers**", and each, a "**Borrower**") and each Person party thereto as a guarantor from time to time, and hereby gives you notice, irrevocably, pursuant to and as required by Section 3.2(a) of the Agreement, that Loan Parties hereby request a Term [B][C] Loan under the Agreement, and in that connection set forth below the information relating to such Term [B][C] Loan:

1. The requested Funding Date of such Credit Extension is [_____, 20___];
2. The requested principal amount of such Credit Extension is [_____]; and
3. The Deposit Account maintained at CIBC Bank USA to which funds are to be disbursed is as follows: [_____].

Lender is hereby authorized to deduct amounts from the foregoing Credit Extension to be applied to Lender Expenses and outstanding fees then due as set forth on the attached Schedule 1.

Borrower Representative represents that each of the conditions precedent to the Credit Extension set forth in the Agreement are satisfied and shall be satisfied on the Funding Date, including: (i) the representations and warranties set forth in the Agreement and in the other Loan Documents are true and correct in all material respects (other than such representations and warranties that are already qualified by materiality, Material Adverse Effect or similar language, in which case such representations and warranties shall be true and correct in all respects) on the date hereof and on the Funding Date; provided, however, that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects (other than such representations and warranties that are already qualified by materiality, Material Adverse Effect or similar language, in which case such representations and warranties shall be true and correct in all respects) as of such date, (ii) no Default or Event of Default has occurred and is continuing or would result from the Credit Extension, and (iii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred.

Borrower Representative agrees to notify Lender promptly before the Funding Date if any of the matters which have been represented above shall not be true and correct in all material respects on the Funding Date and if Lender has received no such notice before the Funding Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct in all material respects as of the Funding Date.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

This Loan Request is hereby executed as of the date first written above.

BORROWER REPRESENTATIVE:

PULMONX CORPORATION

By: _____

Name: _____

Title: _____

EXHIBIT D

COMPLIANCE CERTIFICATE

TO: CANADIAN IMPERIAL BANK OF COMMERCE Date: _____

FROM: PULMONX CORPORATION

Reference is made to that certain Loan and Security Agreement, dated as of February 20, 2020 (as amended, restated, supplemented or otherwise modified, from time to time, the "**Agreement**"), among CANADIAN IMPERIAL BANK OF COMMERCE ("**Lender**"), PULMONX CORPORATION, a Delaware corporation, each other Person party thereto as a borrower from time to time (collectively, "**Borrowers**", and each, a "**Borrower**") and each Person party thereto as a guarantor from time to time. Capitalized terms have meanings as defined in the Agreement.

The undersigned authorized officer of Borrower Representative, hereby certifies in accordance with the terms of the Agreement as follows:

(1) Each Loan Party is in compliance for the period ending _____ with all covenants set forth in the Agreement; (2) no Event of Default has occurred and is continuing; and (3) the representations and warranties in the Agreement are true and correct in all material respects on this date; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further, that those representations and warranties expressly referring to a specific date shall be true and correct in all material respects as of such date.

Schedule 1 sets forth true and correct calculations with respect to the financial covenants in Section 6.10 of the Agreement.

The undersigned certifies that all financial statements delivered herewith are prepared in accordance with GAAP (other than, with respect to unaudited financials for the absence of footnotes and being subject to normal year-end adjustments), consistently applied from one period to the next. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No/N/A under "Complies" column.

Reporting Covenants	**Required**	**Complies**
Monthly financial statements and Compliance Certificate	Monthly, within 30 days	Yes No N/A
Annual Projections and Budget	Annually, within 60 days of fiscal year end	Yes No N/A
Cash report and flash sales report	Monthly, within 30 days	Yes No N/A
Annual audited financial statements, any management letters and Compliance Certificate	Annually, within 180 days of fiscal year end	Yes No N/A
Statements, reports and notices to stockholders	Within five days of delivery	Yes No N/A
SEC filings	Within five days after filing with SEC	Yes No N/A
Legal action notices	Promptly	Yes No N/A
409A valuation report	Together with this Compliance Certificate if received during period covered hereby	Yes No N/A
General Session Board Materials	Within 30 days after the last day of the month in which materials were delivered to Board	Yes No N/A
Summary capitalization table	Together with this Compliance Certificate if a material modification occurred during period covered hereby	Yes No N/A

IP reports	Together with the Compliance Certificate delivered for the end of each calendar month constituting the end of a fiscal quarter	Yes No N/A
Bank account statements (with transaction detail)	Together with each Compliance Certificate	Yes No N/A
Copies of equity financing documents	Together with Compliance Certificate due after closing of such financing	Yes No N/A
Insurance reductions	30 days prior to any proposed revocation	Yes No N/A
Amendments to Operating Documents	Promptly (and prior to an initial public offering)	Yes No N/A
Defaults	Within 3 Business Days upon a Loan Party becoming aware of the existence	Yes No N/A

Financial Covenants	**Required**	**Complies**
Minimum Revenue	See Schedule 1 hereto	Yes No
Revenue	Reporting requirement for months that are not a quarter end	N/A
Unrestricted cash	See Schedule 1 hereto	Yes No
Unrestricted cash	Monthly requirement	N/A

Other Covenants	**Required**	**Actual**	**Complies**
Purchase money Indebtedness (including capital leases)	Not to exceed $250,000 outstanding at any time	**$**	Yes No
Indebtedness in respect of cash management services and credit cards	Not to exceed $250,000 outstanding at any time	**$**	Yes No
Indebtedness in respect of letters of credit, bank guarantees, bankers' acceptances, warehouse receipts or similar instruments	Not to exceed $500,000 outstanding at any time	**$**	Yes No
Repurchases of stock pursuant to Section 7.7(a)	Not to exceed $100,000 per fiscal year (or $500,000 per fiscal year per Section 7.7)	**$**	Yes No
Capital Expenditures	Not to exceed 110% of board-approved projections per fiscal year	**$**	Yes No
Investments of cash and Cash Equivalents in Subsidiaries	Not to exceed $1,000,000 in any fiscal year	**$**	Yes No
Investments for travel advances and employee loans	Not to exceed $250,000 outstanding	**$**	Yes No
Liens of carriers, warehousemen, suppliers	Not to exceed $50,000 at any time	**$**	Yes No

Other Matters

Has any Loan Party changed its legal name, jurisdiction of organization or chief executive office? If yes, please complete details below: Yes No

_____

Has there been any change of Chief Executive Officer, President or Chief Financial Officer of Borrower Representative? If so, please describe appointment of any interim replacement or full-time replacement by a candidate with equivalent qualifications: Yes No

_____

Have any new Subsidiaries been formed? If yes, please provide complete schedule below. Yes No

Legal Name of Subsidiary	**Jurisdiction of Organization**	**Holder of Subsidiary Equity Interests**	**Equity Interests Certificated? (Y/N)**	**Jurisdiction**

Have any new Deposit Accounts or Securities Accounts been opened? If yes, please complete schedule below. Yes No

Accountholder	**Deposit Account / Intermediary**	**Address**	**Account Number**	**Account Control Agreement in place? (Y/N)**

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

BORROWER REPRESENTATIVE:

PULMONX CORPORATION

By: _____

Name: _____

Title: _____

SCHEDULE 1

FINANCIAL COVENANT CALCULATIONS

[Attached.]

EXHIBIT E

REQUIREMENTS FOR INSURANCE DOCUMENTATION

Contact Information for Insurance Documentation:

CANADIAN IMPERIAL BANK OF COMMERCE
595 Bay Street, 5th Floor
Toronto ON M5G 2C2

Document Requirements:

DOCUMENT	REQUIREMENT
1. Certificate of Liability Insurance	• Canadian Imperial Bank of Commerce and its successors and assigns to be designated as **"Additional Insured"**. • Canadian Imperial Bank of Commerce name and address to be listed as Certificate Holder.
2. General Liability Endorsement (Additional Insured Endorsement)	• Canadian Imperial Bank of Commerce and its successors and assigns to be named in additional insured endorsement.
3. Evidence of Commercial Property Insurance	• All-risk commercial property insurance incurring all of each Loan Party's property • Canadian Imperial Bank of Commerce and its successors and assigns to be designated as **"Lender's Loss Payee**,**"** with **Lender's Loss Payable** provision designated. • Canadian Imperial Bank of Commerce name and address to be designated in Name and Address of Additional Interest. • Insured locations to include all locations of Loan Parties listed in the Perfection Certificate
4. Commercial Property Endorsement (Lender's Loss Payable Endorsement)	• Canadian Imperial Bank of Commerce and its successors and assigns to be scheduled and designated as "Lender Loss Payee" by endorsement • Lender loss payable clause with stipulation that coverage will not be cancelled or diminished without a minimum of 10 days' prior written notice for non-payment of premium, or 30 days for any other cancellation.

SCHEDULE 1

DISQUALIFIED INSTITUTIONS

None.

Exhibit 10.20

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, restated, supplemented or otherwise modified from time to time, this "**Agreement**") is entered into as of February 20, 2020, between CANADIAN IMPERIAL BANK OF COMMERCE ("**Lender**") and PULMONX COPORATION, a Delaware corporation ("**Grantor**").

RECITALS

A. Lender and Grantor, among others, are entering into that certain Loan and Security Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "**Loan Agreement**"). Defined terms used herein without definition shall have the meanings set forth in the Loan Agreement.

B. The Obligations are secured by the Collateral including, without limitation, all of Grantor's Intellectual Property.

C. Grantor's execution and delivery of this Agreement is a condition to the effectiveness of the Loan Agreement.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, Grantor and Lender hereby agree:

AGREEMENT

1. To secure the Obligations, Grantor grants Lender a security interest in all of Grantor's right, title and interest in its Intellectual Property to the extent constituting Collateral. Grantor hereby confirms that the attached schedules of Grantor's copyright, patent and trademark applications and registrations, which are registered or filed with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, attached hereto as Exhibits A, B and C hereto, respectively, are complete and accurate as of the date hereof.

2. Grantor hereby authorizes Lender, upon notice to Grantor, to (a) modify this Agreement unilaterally by amending the Exhibits to this Agreement to include any Intellectual Property which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate of this Agreement containing amended exhibits reflecting such new Intellectual Property.

3. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement. Delivery of an executed counterpart of a signature page of any Loan Document by electronic means shall be effective as delivery of an original executed counterpart of such Loan Document. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

4. This Agreement is a Loan Document and shall be governed by, and construed in accordance with, the laws of the State of New York.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the undersigned have duly executed this Intellectual Property Security Agreement as of the first date written above.

Address of Grantor:

Pulmonx Corporation
700 Chesapeake Drive
Redwood City, CA 94063
e-mail: [E-mail Address Intentionally Omitted]
Attention: Derrick Sung, Ph.D.

GRANTOR:

PULMONX CORPORATION

By: /s/ Derrick Sung
Name: Derrick Sung, Ph.D.
Title: Chief Financial Officer

Address of Lender:

CIBC Innovation Banking
40 King S. West, Suite 5702
Toronto, Ontario

M5H 3Y2
Attention: Mark McQueen, President and Executive Managing Director

LENDER:

CANADIAN IMPERIAL BANK OF COMMERCE

/s/ Mark Usher
By:
Name: Mark Usher
Title: Authorized Signatory

By: /s/ Imran Premji
Name: Imran Premji
Title: Authorized Signatory

EXHIBIT A

COPYRIGHTS

None.

EXHIBIT B

PATENTS

See attached.

EXHIBIT C

TRADEMARKS

See attached.

Exhibit 21.1

Subsidiaries of Pulmonx Corporation

Name of Subsidiary	Jurisdiction of Organization
Pulmonx Australia Pty Ltd	Australia
Pulmonx International Development	Cayman Islands
Pulmonx GmbH	Germany
Pulmonx Hong Kong Limited	Hong Kong
Pulmonx Italy Srl	Italy
Pulmonx Global B.V.	The Netherlands
PulmonX International Sàrl	Switzerland
Pulmonx UK Limited	United Kingdom

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

Pulmonx Corporation
Redwood City, California

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated February 21, 2020, relating to the consolidated financial statements of Pulmonx Corporation, which is contained in that Prospectus. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP

San Jose, California
February 28, 2020