

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 which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary 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 preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 14, 2018

PRELIMINARY PROSPECTUS

Shares



Liquidia Technologies, Inc.

Common Stock

We are offering _____ shares of our common stock. This is our initial public offering and no public market currently exists for our common stock. We expect the initial public offering price to be between \$ _____ and \$ _____ per share. We have applied to list our common stock on The Nasdaq Global Market under the symbol "LQDA".

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933 and will be subject to reduced public company reporting requirements. See "Prospectus Summary—Implications of Being an Emerging Growth Company".

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page 13 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.

	<u>PER SHARE</u>	<u>TOTAL</u>
Public Offering Price	\$	\$
Underwriting Discounts and Commissions ⁽¹⁾		
Proceeds to Liquidia Technologies, Inc. before expenses		

⁽¹⁾ See "Underwriting" on page 172 for additional information regarding underwriting compensation.

Delivery of the shares of common stock is expected to be made on or about _____, 2018. We have granted the underwriters an option for a period of 30 days to purchase an additional _____ shares of our common stock. If the underwriters exercise the option in full, the total discounts and commissions payable by us will be \$ _____, and the total proceeds to us, before expenses, will be \$ _____.

Joint Book-Running Managers

Jefferies

Cowen

Co-Managers

Needham & Company

Wedbush PacGrow

Prospectus dated _____, 2018.

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You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the U.S. Securities and Exchange Commission, or the SEC. Neither we nor the underwriters have authorized anyone to provide you with information other than that contained in this prospectus or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell, and seeking offers to buy, common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover page of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

Through and including _____, 2018 (25 days after the commencement of this offering), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to their unsold allotments or subscriptions.

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 the United States. See "Underwriting."

TRADEMARKS

This prospectus includes our trademarks, trade names and service marks, such as Liquidia, the Liquidia logo and PRINT, which are protected under applicable intellectual property laws and are the property of Liquidia Technologies, Inc. This prospectus also contains trademarks, trade names and service marks of other companies, which are the property of their respective owners. Solely for convenience, trademarks, trade names and service marks referred to in this prospectus may appear without the ®, ™ or SM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks, trade names and service marks. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

MARKET AND INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate is based on reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources as well as our own internal estimates and research. Decision Resources Group is the primary source for the market data included in this prospectus and we compensated them for use of market data. Although we believe the data from these third-party sources is reliable, we have not independently verified any third-party information. In addition, projections, assumptions and estimates of the future performance of the industry in which we operate and our future performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider before deciding to invest in our common stock. You should read the entire prospectus carefully, including the "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Except where the context otherwise requires or where otherwise indicated, the terms "Liquidia," "we," "us," "our," "our company" and "our business" refer to Liquidia Technologies, Inc.

Overview

We are a late-stage clinical biopharmaceutical company focused on the development and commercialization of human therapeutics using our proprietary PRINT® technology to transform the lives of patients. PRINT is a particle engineering platform that enables precise production of uniform drug particles designed to improve the safety, efficacy and performance of a wide range of therapies. We are currently focused on the development of two product candidates for which we hold worldwide commercial rights: LIQ861 for the treatment of pulmonary arterial hypertension, or PAH, and LIQ865 for the treatment of local post-operative pain. Our lead product candidate, LIQ861, is being evaluated in a Phase 3 trial. LIQ861 is a dry powder formulation of treprostinil designed to improve the therapeutic profile of treprostinil by enhancing deep-lung delivery and achieving higher dose levels than current inhaled therapies. We have applied our PRINT technology to enable us to deliver LIQ861 through a convenient, disposable dry powder inhaler, or DPI. We have also applied our PRINT technology to our second product candidate, LIQ865, currently being evaluated in a Phase 1 trial, which is designed to deliver sustained-release particles of bupivacaine, a non-opioid anesthetic, to treat local post-operative pain for three to five days through a single administration. In addition to developing our two product candidates, we collaborate, and intend to collaborate, with leading pharmaceutical companies to develop their own product candidates across a wide range of therapeutic areas, molecule types and routes of administration, leveraging our PRINT technology.

Our lead product candidate, LIQ861, is being evaluated for the treatment of PAH, a chronic, progressive disease caused by the hardening and narrowing of pulmonary arteries that can lead to right heart failure and eventually death. Prostacyclin is a vasoactive mediator essential to normal lung function that is deficient in patients with PAH. With PAH, the elevated pressure in the pulmonary arteries strains the right side of the heart as it pumps blood to the lungs. The extra stress causes the heart to enlarge and become less flexible, compromising its ability to push blood out of the heart through the lungs and into the rest of the body. PAH initially presents as exertional dyspnea, lethargy and fatigue and may be confused with other disease states with similar symptoms. PAH often goes undiagnosed or misdiagnosed until symptoms become severe, with the mean time from onset of symptoms to correct diagnosis being more than two years in the United States. As PAH progresses and right ventricular failure develops, exertional chest pain, or angina, exertional syncope and peripheral edema may develop. Following confirmation of diagnosis based on hemodynamic parameters, treatment is recommended to lower pulmonary pressures and treat the symptoms of PAH. Due to delayed diagnosis, many patients already have advanced disease requiring aggressive treatment combining multiple classes of therapy. PAH is a rare disease, with an estimated prevalence in the United States expected to be between 25,000 and 30,000 patients by 2020. PAH is most commonly diagnosed in the developed world, including the United States, Europe and Japan. Today, the mean age of diagnosis is 50 years according to both French and U.S. registries, with more women being diagnosed than men. Patients may have idiopathic PAH in which no underlying cause can be determined or a heritable form of the disease. A large number of PAH patients also have associated comorbidities such as congenital heart disease, HIV, connective tissue diseases like scleroderma, liver diseases, systemic hypertension, obesity, clinical depression, non-PAH related obstructive airways disease, sleep apnea and diabetes.

Decision Resources Group, an independent industry research firm, estimated that in 2016 more than 50% of patients with PAH in the United States were prescribed treprostinil across its three routes of administration (oral, inhaled and parenteral infusion), generating revenue that represented about one-third of the approximately \$3.7 billion U.S. market for PAH drug therapies. The inhaled route of administration, in which medication is inhaled directly into the lungs, helps minimize the off-tissue adverse side effects of systemic delivery by delivering the drug directly where it is needed. Tyvaso® (treprostinil, inhaled solution), marketed by United Therapeutics Corporation in the United States, is the standard of care among the inhaled therapies, with more than 80% of inhaled prostacyclin sales in the United States. Current inhaled therapies, including Tyvaso, are delivered by a nebulizer, a device that converts a liquid formulation into mist, and require between four and nine doses per day. Nebulizers require regular care and maintenance, including daily cleaning and access to additional parts and supplies, such as distilled water and a power source, all of which compromise the portability of the device and the quality of life of patients.

We believe LIQ861, if approved, will be the first-to-market inhaled dry powder treprostinil that can be delivered using a convenient, palm-sized, disposable DPI. We believe LIQ861 can overcome the limitations of current inhaled therapies and has the potential to maximize the therapeutic benefits of treprostinil in treating PAH by safely delivering higher doses into the lungs. Based on our *in vitro* studies we believe that the precise size, trefoil-like shape and uniformity of each LIQ861 particle may provide deep-lung delivery of treprostinil and reduces deposition in the upper airway where irritation and pain have been observed with nebulized treprostinil. If approved, we believe LIQ861 will have the potential to increase the number of patients using the inhaled route of treatment for PAH by providing the benefits of inhaled prostacyclin therapy earlier in a patient's disease progression as well as delaying the burden of starting continuously infused products.

Our second product candidate, LIQ865, is an injectable, sustained-release formulation of bupivacaine for the management of local post-operative pain for three to five days after a procedure. We believe LIQ865, if approved, has the potential to provide significantly longer local post-operative pain relief compared to currently marketed formulations of bupivacaine. We estimate that there were over 40 million surgeries in our target market, which consists of orthopedic and soft tissue surgeries, performed in the United States in 2016. According to IMS Health, an independent market research firm, the global market for local anesthetics was approximately \$776 million in 2016. Post-operative pain management is becoming more important as surgeries increase in volume and complexity and hospitals seek treatments that support faster recovery and time to discharge. Concurrently, the risk of opioid abuse and diversion has led physicians, payors and the U.S. federal government to prioritize pain management strategies that minimize reliance on opioids. Local anesthetics, such as bupivacaine, provide a well-established, non-opioid option for post-operative pain management, but their duration of efficacy has been limited to eight hours or less. The United States Food and Drug Administration, or the FDA, has approved one long-acting local anesthetic, liposomal bupivacaine, but pain relief typically lasts only 24 to 36 hours, according to physicians, and its use in combination with other local anesthetics can result in an unsafe release of drug. In LIQ865, we have engineered the size and composition of the PRINT particles to release bupivacaine over three to five days through a single administration.

Both LIQ861 and LIQ865 are being developed using our proprietary PRINT particle engineering technology, which allows us to engineer and manufacture highly uniform drug particles with independent control over their size, three-dimensional geometric shape and chemical composition. By controlling these physical and chemical parameters of particles, PRINT enables us to engineer desirable pharmacological benefits into product candidates, including prolonged duration of drug release, increased drug loading, more convenient routes of administration, the ability to create novel combination product, enhanced storage and stability and the potential to reduce adverse side effects. Controlling three-dimensional geometric shape and chemical composition of drug particles enables us to research, identify and pursue the improvement of existing therapies and creation of new therapies from existing drugs or new chemical entities, including small molecules and biologics. Our ability to design and control these features of drug particles has the potential

to provide significant benefits across the breadth of pharmaceutical applications. Product characteristics and features can be tuned depending on the need of a particular application, drug substance, delivery route and other such considerations. Based on our research to date, we anticipate the ability to: (i) enhance inhaled delivery through the highly uniform geometric shape of each drug particle; (ii) design desired drug release profiles ranging from minutes post-delivery to days, weeks or months depending on need of a target therapy, by controlling the chemical composition of the drug particles and the surface area-to-volume ratio of the particles; (iii) enable combination products where one or more of the chemical constituents can destabilize or interact by encapsulating the desired constituent in a particle to shield it from another constituent during packaging and storage; and (iv) enhance the deposition and retention of topically delivered products by designing particles with a desired charge and/or Young's modulus. Our molding approach, which we branded as "PRINT", or Particle Replication In Non-wetting Templates, combines the precision of the semi-conductor industry with the high throughput of roll-to-roll manufacturing to make highly uniform micro- and nano-particles at a commercially viable scale. Our manufacturing equipment and materials used in the production of our drug particles are proprietary and protected by our patent portfolio and trade secret know-how. Our PRINT equipment is also modular, scalable and cost-effective. We protect our PRINT technology and the resulting engineered particles through a combination of patents, trade secrets, proprietary know-how and licensing arrangements. We have an active patent strategy that covers major geographic markets, including the United States, Europe and Japan.

Initially, our internal pipeline is focused on the development of improved and differentiated drug products containing FDA-approved active pharmaceutical ingredients, or APIs, with established efficacy and safety profiles, which we believe are eligible for the 505(b)(2) regulatory pathway to seek marketing approval in the United States. The 505(b)(2) regulatory pathway can be capital efficient and potentially enable a shorter time to approval. We intend to seek marketing approval in the United States for LIQ861 and LIQ865 under the 505(b)(2) regulatory pathway, which would allow us to rely in part on existing knowledge of the safety and efficacy of the reference listed drugs. LIQ861 and the DPI together will be regulated as a combination product by the FDA. In addition to building our own internal pipeline, we collaborate with leading pharmaceutical companies to develop their own product candidates across a wide range of therapeutic areas, molecule types and routes of administration. Through our collaboration arrangements with established pharmaceutical leaders, such as GlaxoSmithKline plc and its subsidiaries, collectively, GSK, we apply PRINT technology to novel molecules. GSK applies our PRINT technology broadly across inhaled delivery of their small molecule and biologic chemical entities. If our product candidates receive marketing approval, we plan to commercialize them in the United States by establishing our own sales force and commercial infrastructure. Outside of the United States, we intend to pursue the regulatory approval and commercialization of our product candidates with leading pharmaceutical companies with regional expertise. We intend to manufacture PRINT particles using in-house capabilities. Where appropriate, we will rely on contract manufacturing organizations, or CMOs, to produce, package and distribute our approved drug products on a commercial scale.

Product Pipeline

The following table summarizes key information about clinical-stage product candidates being developed using PRINT technology:

Product	Indication	Formulation & Route	Phase 1	Phase 2	Phase 3	Next Key Milestone	Worldwide Commercial Rights
LIQ861 ¹	PAH	Dry powder inhalation				Interim safety data 1H:19	Liquidia
LIQ865	Local, post-operative pain	Sustained-release injectable				Ph2-enabling studies 2H:18	Liquidia
CC115106	COPD ²	Dry powder inhalation					GSK

1. After consultation with the FDA, we advanced from a Phase 1 trial directly to a single, pivotal Phase 3 trial and will seek approval under the 505(b)(2) pathway
2. COPD is chronic obstructive pulmonary disease

Our Strategy

Our goal is to develop and commercialize medicines with improved and differentiated product profiles based on our PRINT particle engineering technology. To achieve this goal, we intend to execute the following key elements of our business strategy:

- § **Complete the pivotal, safety and pharmacology Phase 3 trial for our lead product candidate, LIQ861, in PAH.** We initiated a single, open-label Phase 3 trial, known as INSPIRE, or Investigation of the Safety and Pharmacology of Dry Powder Inhalation of Treprostinil, in 100 patients with PAH. We believe, based on feedback from the FDA, that this clinical trial will support the new drug application, or NDA, filing for our novel inhaled dry powder formulation of treprostinil to treat PAH. We expect to release interim safety data from INSPIRE in the first half of 2019.
- § **Advance our local post-operative pain product candidate, LIQ865, through Phase 2-enabling toxicology studies.** We have completed one Phase 1 clinical trial of LIQ865, our novel long-acting formulation of bupivacaine, in Denmark and we are conducting a second Phase 1 clinical trial in the United States. We expect to initiate Phase 2-enabling toxicology studies in the second half of 2018.
- § **Secure regulatory approval and commercialize our internal product candidates independently in the United States and with leading pharmaceutical companies globally.** We hold worldwide commercialization rights to LIQ861 and LIQ865. Subject to receiving marketing approval, which we intend to pursue in the United States via the 505(b)(2) regulatory pathway, we intend to independently pursue the commercialization of LIQ861 in the United States by establishing targeted sales and marketing teams. After reviewing the results of our Phase 2-enabling toxicology studies for LIQ865, and subject to the availability of sufficient funding, we will develop and commercialize LIQ865 independently, if it is ultimately approved, or seek to license this product candidate to one or more third parties. Outside of the United States, we intend to pursue the regulatory approval and commercialization of LIQ861 and LIQ865 with leading pharmaceutical companies with regional expertise.
- § **Expand our internal pipeline leveraging our PRINT technology.** We intend to continue targeting diseases where we believe our PRINT technology can improve the efficacy, safety and patient experience of current treatments that have been impaired by suboptimal drug product formulation and delivery. We plan to focus initially on the development of improved and differentiated drug products containing FDA-approved APIs with proven efficacy and safety profiles eligible to use the

505(b)(2) regulatory pathway. In addition, we may expand our clinical development of LIQ861 and LIQ865, where appropriate, into broader indications or new applications.

- § ***Pursue strategic collaborations to maximize the value of products enabled by PRINT technology.*** In addition to advancing our own internal product candidates, we intend to continue collaborating with leading pharmaceutical companies to expand the applications for our PRINT technology. Our collaborations help advance new PRINT capabilities, while adding to our intellectual property portfolio.

Our Competitive Strengths

We believe that we have several key strengths that have contributed to the development of our business and that will help us to realize our goal of becoming a biopharmaceutical company across research, development and commercialization activities. Our competitive strengths include:

- § ***Our PRINT technology gives us the capability to overcome the constraints of conventional formulation and production methods and can be applied broadly across therapeutic areas, molecule types and routes of administration.*** Our PRINT technology allows us to precisely engineer drug particles in a wide variety of compositions, sizes and shapes and achieve a high level of control over the physical and chemical characteristics of drug particles, as compared to conventional formulation and production methods. PRINT particles can be designed to address specific pharmacological or therapeutic objectives, such as enhancing the route of administration, improving solubility, enhancing stability or extending therapeutic effects. Using our PRINT technology, we are able to engineer, among others, small molecule and biologic particles, single agent drug and combination drug particles and vaccine particles to improve efficacy, safety and convenience for patients. Our internal pipeline strategy is currently focused on developing proprietary innovations to currently approved drug products in order to minimize development risks and increase speed to market.

In particular, we have designed LIQ861 to maximize the therapeutic benefits of tadalafil in treating PAH by safely delivering higher doses into the lungs using a convenient, palm-sized, disposable DPI. We believe that this may lead to a more attractive product profile with a more convenient method of administering the drug, as compared to existing inhaled therapies. We have also designed LIQ865 with the intention of providing patients with local post-operative analgesia for three to five days. We believe this would provide a longer period of pain relief than existing local-acting pain drugs, which could be a positive feature in light of interest in reducing reliance on opioids and non-steroidal anti-inflammatory drugs, or NSAIDs, for local post-operative pain management.

Our PRINT technology is broadly applicable — across therapeutic areas, molecule types and routes of administration — providing us with opportunities for future drug product development.

- § ***We have scaled operations with rapid and cost-effective transition to clinical development and commercial production.*** We believe our research and development operations and PRINT technology allow us to transition rapidly and cost-effectively from laboratory to clinical development and commercial-scale manufacture of drug particles. Utilizing well-established techniques from other roll-to-roll manufacturing processes, we have scaled PRINT technology to support the quality and quantity needs for clinical and, we believe, commercial production of our product candidates. We believe our production facilities comply with the FDA's current good manufacturing practices, or cGMP, requirements. The physical equipment for the PRINT technology requires a relatively small footprint, low capital investment and minimal operating costs. We believe that our PRINT technology provides us and our CMOs with the ability to expand production capacity cost-effectively.
- § ***We have a strong proprietary position through a combination of patents, trade secrets, proprietary know-how and licensing arrangements.*** We protect our PRINT technology and the resulting engineered particles through a combination of patents, trade secrets, proprietary know-how and licensing arrangements. We have an active patent strategy that covers major geographic markets, including the United States, Europe and Japan. As of March 9, 2018, our patent portfolio, which

includes patents and patent applications we own or co-own, as well as patents and patent applications we have licensed from third parties, such as the University of North Carolina at Chapel Hill, or UNC, comprises 81 issued patents and 45 pending patent applications worldwide. As we develop new product candidates, either independently or with collaborators, we will seek additional patent protection.

- § **We have strong capabilities in pharmaceutical research and clinical development.** Our research and development team includes 27 employees, led by our senior management, and has extensive experience in clinical development and pharmaceutical research and development activities in our specific areas of research interest.
- § **We have a seasoned management team.** Our team includes industry veterans with significant experience in drug discovery, development and commercialization. Members of our leadership team have worked across different segments of the pharmaceutical industry, including branded and generic pharmaceuticals, medical devices and manufacturing services. Prior to joining us, our Chief Executive Officer and director, Neal Fowler, served as president of Centocor, Inc., a subsidiary of Johnson & Johnson that is focused on the development and commercialization of biomedicines used to treat chronic inflammatory diseases. Additionally, our President and Chief Financial Officer, Kevin Gordon, previously served as executive vice president and chief operating officer and chief financial officer of Quintiles Transnational Holdings Inc. (now named IQVIA Holdings Inc.), a global biopharmaceutical services provider, and our Chief Operations Officer, Robert Lippe, previously served as executive vice president of operations and chief operations officer at Alexza Pharmaceuticals, Inc. Furthermore, our Senior Vice President, Product Development, Dr. Robert Roscigno, previously served as the executive vice president of GeNO, LLC, where he led the clinical development team working on a novel nitric oxide delivery system, and before that he served as the president and chief operating officer of Lung Rx, Inc., where he was part of the team responsible for bringing Tyvaso through Phase 3 development, and he previously served in multiple leadership positions at United Therapeutics Corporation and its subsidiaries, contributing to the successful development and worldwide commercialization of Remodulin™, which is treprostinil administered through subcutaneous intravenous infusion, for the treatment of PAH. We believe that their experience enables us to evaluate opportunities and build collaboration arrangements that match the breadth of the potential applications of our PRINT technology.

Risks Related to Our Business

Our ability to successfully implement our business strategy is subject to numerous risks, as more fully described in the section entitled "Risk Factors" immediately following this prospectus summary. These risks include, among others:

- § We are a clinical-stage biopharmaceutical company with no approved products and no historical product revenue, which may make it difficult for you to evaluate our business, financial condition and prospects.
- § We are primarily dependent on the success of our lead product candidate, LIQ861, and to a lesser degree, LIQ865, which are still in clinical development, and these product candidates may fail to receive marketing approval or may not be commercialized successfully.
- § Our preclinical studies and clinical trials may not be successful and delays to such preclinical studies or clinical trials may cause our costs to increase and significantly impair our ability to commercialize our product candidates.
- § We are planning to pursue the FDA 505(b)(2) pathway to apply for marketing approval of our product candidates in the United States. If we are unable to rely on the 505(b)(2) regulatory pathway, we will be required to seek approval of these product candidates through the 505(b)(1) NDA pathway, which would require full clinical trials to establish safety and effectiveness, and the process of obtaining marketing approval for our product candidates would likely be significantly longer and more costly.

- § If we are unable to establish licensing and collaboration arrangements with other pharmaceutical companies on acceptable terms, or at all, we may not be able to develop and commercialize additional product candidates using our PRINT technology.
- § We may not be able to build our marketing and sales capabilities or enter into agreements with third parties to market and sell our drug products.
- § We depend on GSK for a significant portion of our near-term revenue.
- § We depend on third parties for clinical and commercial supplies, including a single supplier for the active ingredient of LIQ861.
- § Even if this offering is successful, we expect that we will need further financing for our existing business and future growth, which may not be available on acceptable terms, if at all. Failure to obtain funding on acceptable terms and on a timely basis may require us to curtail, delay or discontinue our product development efforts or other operations. The failure to obtain further financing may also prevent us from capitalizing on other potential product candidates or indications which may be more profitable than LIQ861 and LIQ865 or for which there may be a greater likelihood of success.
- § We may be unable to continually develop a pipeline of product candidates, which could affect our business and prospects.
- § We may encounter difficulties in enrolling patients in our clinical trials.
- § The marketing approval processes of the FDA and comparable regulatory authorities in other countries are unpredictable and our product candidates may be subject to multiple rounds of review or may not receive marketing approval.
- § The commercial success of our drug products depends on the availability and sufficiency of third-party payor coverage and reimbursement.
- § Our commercial success depends largely on our ability to protect our intellectual property.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. As an emerging growth company:

- § we may present only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- § we may provide reduced disclosure about our executive compensation arrangements;
- § we are not required to have advisory votes on executive compensation or golden parachute arrangements; and
- § we have an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of 2023; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC. We have chosen to opt out of the extended transition periods available to emerging growth companies under the JOBS Act for complying with new or revised accounting standards. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition periods for complying with new or revised accounting standards is irrevocable. We may choose to take advantage of some but not all of these other exemptions available to emerging growth companies. We have

taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock.

Corporate Information

Liquidia Technologies, Inc. was incorporated in Delaware on June 8, 2004. Our principal executive offices are located at 419 Davis Drive, Suite 100, Morrisville, North Carolina 27560 and our telephone number is (919) 328-4400. Our website is located at www.liquidia.com. The information on or that can be accessed through our website is not incorporated by reference into this prospectus, and you should not consider any such information as part of this prospectus or in deciding whether to purchase our common stock.

THE OFFERING

Issuer	Liquidia Technologies, Inc.	
Common stock offered by us	shares (or	shares if the underwriters exercise their option to purchase additional shares in full).
Common stock to be outstanding immediately 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 to the underwriters the option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of common stock.	
Use of proceeds	<p>We estimate that the net proceeds to us from this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$ million (or approximately \$ million if the underwriters exercise in full their option to purchase additional shares of common stock), based on an assumed initial public offering price of \$ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus. We currently estimate that we will use the net proceeds from this offering to complete our ongoing Phase 3 clinical trial of LIQ861, advance LIQ865 through our ongoing Phase 1 trial in the United States and our planned Phase 2-enabling toxicology studies, fund operations supporting the development of LIQ861 and LIQ865 and repay approximately \$2.3 million of outstanding indebtedness. We will use the remainder for working capital and general corporate purposes.</p> <p>See "Use of Proceeds" for more information.</p>	
Risk factors	You should read the "Risk Factors" section beginning on page 13 of this prospectus for a discussion of the factors you should carefully consider before deciding to purchase any shares of our common stock.	
Proposed Nasdaq Global Market symbol	"LQDA"	

The number of shares of our common stock to be outstanding after this offering is based on 9,254,228 shares of our common stock outstanding as of December 31, 2017, and gives effect to the issuance of 91,147,482 shares of Series D preferred stock in February 2018 and the conversion of all of our outstanding preferred stock, including our Series D preferred stock, and Class B non-voting common stock into shares of our common stock, which will occur automatically upon the closing of this offering, and excludes:

- § 11,245,985 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2017, with a weighted average exercise price of \$0.27 per share;
- § shares of common stock issuable upon the exercise of stock options granted after December 31, 2017, with a weighted average exercise price of \$ per share;

- § 2,146,767 shares of common stock issuable upon the vesting of restricted stock units granted after December 31, 2017 to Kevin Gordon, our President and Chief Financial Officer;
- § 4,699,565 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2017, with a weighted average exercise price of \$0.09 per share;
- § an aggregate of shares of common stock issuable upon the exercise of stock options to be granted to certain of our officers and directors on the date of execution of the underwriting agreement under the 2018 Plan, assuming we sell shares in this offering;
- § shares of common stock issuable upon the vesting of restricted stock units to be granted to Mr. Gordon on the date of execution of the underwriting agreement pursuant to his employment agreement, assuming we sell shares in this offering;
- § an additional 9,209,365 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. Stock Option Plan, as amended, or the 2004 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering;
- § an additional 1,087,617 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, or the 2016 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering; and
- § an additional shares of common stock that will be made available for future issuance under the Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, or the 2018 Plan, upon the effectiveness of the registration statement of which this prospectus forms a part.

Unless otherwise indicated, all information in this prospectus reflects or assumes the following:

- § the filing of our amended and restated certificate of incorporation and the effectiveness of our amended and restated by-laws upon the closing of this offering;
- § the conversion of all of our outstanding shares of preferred stock into an aggregate of shares of common stock upon the closing of this offering;
- § no exercise of outstanding options after December 31, 2017;
- § a -for- reverse split of our common stock to be effected prior to the completion of this offering; and
- § no exercise by the underwriters of their option to purchase up to additional shares of common stock in this offering.

SUMMARY FINANCIAL DATA

The following tables set forth, for the periods and at the dates indicated, our summary financial data. The statement of operations data for the years ended December 31, 2016 and 2017 and the balance sheet data at December 31, 2017 are derived from our audited financial statements appearing elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future period. You should read the following information together with the more detailed information contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the accompanying notes thereto appearing elsewhere in this prospectus. The summary financial data in this section are not intended to replace the financial statements and are qualified in their entirety by the financial statements and related notes included elsewhere in this prospectus.

	Year Ended December 31,	
	2016	2017
Statement of Operations Data:		
Revenues	\$ 13,216,989	\$ 7,258,123
Costs and expenses:		
Cost of sales	918,778	319,759
Research and development	23,319,886	24,753,876
General and administrative	4,841,128	10,212,774
Total costs and expenses	<u>29,079,792</u>	<u>35,286,409</u>
Loss from operations	(15,862,803)	(28,028,286)
Other income (expense):		
Interest income	14,906	268
Interest expense	(85,865)	(13,010,475)
Derivative and warrant fair value adjustment	—	11,884,253
Total other income (expense), net	<u>(70,959)</u>	<u>(1,125,954)</u>
Net loss	(15,933,762)	(29,154,240)
Other comprehensive loss	—	—
Comprehensive loss	<u>\$ (15,933,762)</u>	<u>\$ (29,154,240)</u>
Net loss per share, basic and diluted	<u>\$ (2.16)</u>	<u>\$ (3.08)</u>
Weighted average shares outstanding, basic and diluted	<u>7,361,596</u>	<u>9,475,083</u>
Pro forma net loss per share, basic and diluted (unaudited)		<u>\$</u>
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)		<u>\$</u>

	As of December 31, 2017		
	Actual	Pro forma ⁽¹⁾	Pro forma as adjusted ⁽²⁾
Balance Sheet Data:			
Cash	\$ 3,418,979	\$	\$
Working capital ⁽³⁾	(25,039,296)		
Total assets	14,843,602		
Total debt	21,165,131		
Capital stock and additional paid-in capital	79,721,075		
Accumulated deficit	(113,413,311)		
Total stockholders' (deficit) equity	(33,692,236)		

(1) The pro forma balance sheet data give effect to (i) our issuance of 42,863,825 shares of Series D preferred stock in February 2018 and our receipt of \$25.6 million in aggregate proceeds from the issuance and the related rights offering, (ii) our issuance of 48,283,657 shares of Series D preferred stock at the same time upon the conversion of outstanding convertible notes in the aggregate amount of \$28.9 million, (iii) the conversion of all outstanding shares of preferred stock, including the Series D preferred stock issued in February 2018, into an aggregate of _____ shares of our common stock, which will occur automatically upon the closing of this offering.

(2) The pro forma as adjusted balance sheet data give further effect to (i) our sale of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and (ii) our use of approximately \$2.3 million of the proceeds therefrom to repay debt as described in "Use of Proceeds".

(3) We define working capital as current assets less current liabilities.

The pro forma as adjusted information discussed above is illustrative only and will depend 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, the midpoint of the estimated price range set forth on the cover of this prospectus, would increase or decrease each of pro forma as adjusted cash, working capital, total assets and total stockholders' equity by \$ _____ 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. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares offered by us would increase or decrease each of pro forma as adjusted cash, working capital, total assets and total stockholders' equity by \$ _____ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.

Risks Related to Our Company and our Financial Condition

We have a history of losses, have not commenced commercial operations to date and our future profitability is uncertain.

We have incurred net losses of \$15.9 million and \$29.2 million for the years ended December 31, 2016 and 2017, respectively. We also had negative operating cash flows in 2016 and 2017 and negative working capital at December 31, 2016 and 2017. As of December 31, 2017, we had an accumulated deficit of \$113.4 million.

Since our incorporation, we have invested heavily in the development of our product candidates and technologies, as well as in recruiting management and scientific personnel. To date, we have not commenced the commercialization of our product candidates and all of our revenue has been derived from up-front fees and milestone payments made to us in connection with licensing and collaboration arrangements we have entered into. These up-front fees and milestone payments have been, and may continue to be, insufficient to match our operating expenses. We expect to continue to devote substantial financial and other resources to the clinical development of our product candidates and, as a result, must generate significant revenue to achieve and maintain profitability. We may continue to incur losses and negative cash flow and may never transition to profitability or positive cash flow.

We are primarily dependent on the success of our lead product candidate, LIQ861, and to a lesser degree, LIQ865, which are still in clinical development, and these product candidates may fail to receive marketing approval or may not be commercialized successfully.

We have no products approved for marketing in any jurisdiction and we have never generated any revenue from product sales. Our ability to generate revenue from product sales and achieve profitability depends on our ability, alone or with strategic collaboration partners, to successfully complete the development of, and obtain the regulatory and marketing approvals necessary to commercialize one or more of our product candidates. We expect that a substantial portion of our efforts and expenditure over the next few years will be devoted to our product candidates, LIQ861, a proprietary inhaled dry powder formulation of tadalafil, which is intended as an inhaled therapy for pulmonary arterial hypertension, or PAH, and LIQ865, a sustained-release formulation of bupivacaine for the management of local post-operative pain. We do not anticipate generating revenue from product sales for at least the next few years, if ever.

We completed a Phase 1 clinical trial for LIQ861 and an early Phase 1 clinical trial in Denmark for LIQ865. We commenced a Phase 3 clinical trial for LIQ861 in the first quarter of 2018 and a Phase 1 clinical trial for LIQ865 in the United States in the third quarter of 2017, and we expect to initiate Phase 2-enabling toxicology studies in the second half of 2018. We cannot assure you that our clinical trials, if commenced, will be successful or meet their endpoints.

If we successfully complete the clinical development of LIQ861 and LIQ865, we cannot assure you that they will receive marketing approval. The FDA or comparable regulatory authorities in other countries may delay, limit or deny approval of our product candidates for various reasons. For example, such authorities

may disagree with the design, scope or implementation of our clinical trials, or with our interpretation of data from our preclinical studies or clinical trials. Status as a combination product, as is the case for LIQ861, may complicate or delay the FDA review process. See "—Product candidates that the FDA deems to be combination products, such as LIQ861, or that otherwise rely on innovative drug delivery systems, may face additional challenges, risks and delays in the product development and regulatory approval process." Moreover, the applicable requirements for approval may differ from country to country.

If we successfully obtain marketing approval for LIQ861 and LIQ865, we cannot assure you that they will be commercialized in a timely manner or successfully, or at all. For example, LIQ861 and LIQ865 may not achieve a sufficient level of market acceptance, or we may not be able to effectively build our marketing and sales capabilities or scale our manufacturing operations to meet commercial demand. The successful commercialization of LIQ861 and LIQ865 will also, in part, depend on factors that are beyond our control. Therefore, we may not generate significant revenue from the sale of such products, even if approved. Any delay or setback we face in the commercialization of LIQ861 or LIQ865 may have a material and adverse effect on our business and prospects, which will adversely affect your investment in our company.

We are a clinical-stage biopharmaceutical company with no approved products and no historical product revenue, which may make it difficult for you to evaluate our business, financial condition and prospects.

We are a clinical-stage biopharmaceutical company with no history of commercial operations upon which you can evaluate our prospects. Drug product development involves a substantial degree of uncertainty. Our operations to date have been limited to developing our PRINT technology, undertaking preclinical studies and clinical trials for our product candidates and collaborating with leading pharmaceutical companies, including GlaxoSmithKline plc and/or its subsidiaries, collectively, GSK, to expand the applications for our PRINT technology through licensing as well as joint product development arrangements. We have not obtained marketing approval for any of our product candidates and, accordingly, have not demonstrated an ability to generate revenue from pharmaceutical products or successfully overcome the risks and uncertainties frequently encountered by companies undertaking drug product development. Consequently, your ability to assess our business, financial condition and prospects may be significantly limited. Further, the net losses that we incur may fluctuate significantly from quarter-to-quarter and year-to-year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. Other unanticipated costs may also arise.

Our net losses and significant cash used in operating activities have raised substantial doubt regarding our ability to continue as a going concern.

Our financial statements as of and for the year ended December 31, 2017 include a statement that our recurring losses and cash outflows from operations, our accumulated deficit and our debt maturing within twelve months raise substantial doubt about our ability to continue as a going concern. If we are unable to obtain sufficient funding, our business, prospects, financial condition and results of operations will be materially and adversely affected, and we may be unable to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets are carried on our audited financial statements, and it is likely that investors will lose all or a part of their investment. Our ability to continue as a going concern could also materially limit our ability to raise additional funds through the issuance of new debt or equity securities or generate revenues from licensing and collaboration arrangements. After this offering, future financial statements may also include statements expressing substantial doubt about our ability to continue as a going concern. If we seek additional financing to fund our business activities in the future and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding to us on commercially reasonable terms or at all.

Even if this offering is successful, we expect that we will need further financing for our existing business and future growth, which may not be available on acceptable terms, if at all. Failure to obtain funding on acceptable terms and on a timely basis may require us to curtail, delay or discontinue our product development efforts or other operations. The failure to obtain further financing may also prevent us from capitalizing on other potential product candidates or indications which may be more profitable than LIQ861 and LIQ865 or for which there may be a greater likelihood of success.

We anticipate that we will need to raise additional funds to meet our future funding requirements.

In the event that funds generated from our operations are insufficient to fund our future growth, we may raise additional funds through an issuance of equity or debt securities or by borrowing from banks or other financial institutions. We cannot assure you that we will be able to obtain such additional financing on terms that are acceptable to us, or at all. Global and local economic conditions could negatively affect our ability to raise funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Such financing, even if obtained, may be accompanied by restrictive covenants that may, among others, limit our ability to pay dividends or require us to seek consent for payment of dividends, or restrict our freedom to operate our business by requiring consent for certain actions.

If we fail to obtain additional financing on terms that are acceptable to us, we will not be able to implement our growth plans, and we may be required to significantly curtail, delay or discontinue one or more of our research, development or manufacturing programs or the commercialization of any approved product. Furthermore, if we fail to obtain additional financing on terms that are acceptable to us, we may forgo or delay the pursuit of opportunities presented by other potential product candidates or indications that may later prove to have greater commercial potential than the product candidates and indications that we have chosen to pursue.

We depend on GSK for a significant portion of our near-term revenue.

We are party to a licensing agreement with GSK pursuant to which GSK has exercised an option to exclusively license our PRINT technology for applications in certain inhaled therapies, or the GSK ICO Agreement. We previously entered into a separate licensing agreement with GSK relating to the field of vaccines, or the GSK VCO Agreement. For the years ended December 31, 2016 and 2017, our revenue attributable to our collaboration and licensing arrangements with GSK, which included a combination of billings for particle formulations, manufacturing, milestone payments and amortization of deferred revenue from up-front fees, accounted for approximately 90% and 84%, respectively, of our total revenue.

Any changes in GSK's plans with respect to the GSK ICO Agreement may materially and adversely affect our results of operations and prospects. For example, in December 2017, GSK informed us of its modified plans under the GSK ICO Agreement that reduced its requirements and budget for our research and development support in 2018. Revenues from research and development services under the GSK ICO Agreement were \$3.1 million for the year ended December 31, 2017. We expect that such revenues will be less than \$250,000 during 2018 as a result of GSK's modified plans. In response, in January 2018 we reduced our research and development workforce accordingly, and we anticipate that we will incur approximately \$400,000 in expense relating to the modification. As we have not commenced commercialization of our product candidates, we expect that in the near future, we will continue to derive a significant portion of our revenue from our collaboration and licensing arrangements with GSK. If GSK exercises its right to terminate the GSK ICO Agreement in its entirety or in respect of a particular product, and if we are not able to generate comparable revenue from our other existing or future collaboration and licensing arrangements, our results of operations and prospects could be materially and adversely affected.

Our credit facility with Pacific Western Bank, or PWB, contains operating and financial covenants that restrict our business and financing activities, and is subject to acceleration in specified circumstances, which may result in PWB taking possession and disposing of any collateral.

Our credit facility contains restrictions that limit our flexibility in operating our business. Under the terms of the loan and security agreement, or LSA, with PWB, pursuant to which PWB extended a \$10.0 million term loan facility to us, we may not, among other things, without the prior written consent of PWB, (a) pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock except in certain prescribed circumstances, (b) create, incur, assume, guarantee or be or remain liable with respect to any indebtedness except certain permitted indebtedness or prepay any indebtedness, (c) replace or suffer the departure of our Chief Executive Officer or Chief Financial Officer without delivering written notification to PWB within 10 days of such change or (d) suffer a change on our board of directors, or the Board, which results in the failure of at least one partner of either New Enterprise Associates or Canaan Partners or their respective affiliates to serve as a voting member. Our facility with PWB is secured by all of our assets excluding our intellectual property, on which we have granted a negative pledge.

We have, in the past, breached multiple covenants in our LSA related to cash levels and reporting requirements, but have obtained waivers from PWB in relation to all such breaches. If we breach certain of our debt covenants and are unable to cure such breach within the prescribed period or are not granted waivers in relation to such breach, it may constitute an event of default under our facility agreements, giving lenders the right to require us to repay the then outstanding debt immediately, and the lenders could, among other things, foreclose on the collateral granted to them to collateralize such indebtedness, which excludes our intellectual property, if we are unable to pay the outstanding debt immediately. A breach of covenants and the acceleration of our repayment obligations by PWB could have a material adverse effect on our business, financial condition, results of operations and prospects.

We face significant competition from large pharmaceutical companies, among others, and our operating results will suffer if we are unable to compete effectively.

We face significant competition from industry players worldwide, including large multi-national pharmaceutical companies, other emerging or smaller pharmaceutical companies, as well as universities and other research institutions.

Many of our competitors have substantially greater financial, technical and other resources, such as a larger research and development staff, and more experience in manufacturing and marketing, than we do. As a result, these companies may obtain marketing approval for their product candidates more quickly than we are able to and be more successful in commercializing their products than us. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaboration arrangements that they enter into with large, established companies. We may also face competition as a result of advances in the commercial applicability of new technologies and greater availability of capital for investment in such technologies. Our competitors may also invest heavily in the discovery and development of novel drug products that could make our product candidates less competitive or may file FDA citizen petitions which may delay the approval process for our product candidates.

Furthermore, our competitors may succeed in developing, acquiring or licensing, on an exclusive basis, pharmaceutical products that are easier to develop, more effective or less costly than any product candidates that we are currently developing or that we may develop. Our competitors may also succeed in developing blocking patents to which we do not have a license.

Any new drug product that competes with a prior approved drug product must demonstrate advantages in safety, efficacy, tolerability or convenience in order to overcome price competition and to be commercially successful. Our approved products are expected to face competition from drug products that are already on the market, as well as those in our competitors' development pipelines. In particular, we expect that

LIQ861 will face competition from Tyvaso®, and Ventavis®, which are existing drug products indicated for the treatment of PAH, potential new entrants such as Insmed Inc.'s INS-1009, as well as generic equivalents of Tyvaso following the expiry of Tyvaso's patent in 2018. We are aware that MannKind Corporation has recently filed an Investigational New Drug application, or IND, and initiated a Phase 1 trial evaluating an inhaled dry powder treprostinil product for the treatment of PAH. We expect LIQ865 to face competition from EXPAREL®, an existing injectable version of bupivacaine. The early success of EXPAREL may make it difficult for us to convince physicians, patients and other members of the medical community to accept and use LIQ865 over EXPAREL. In addition, while EXPAREL is currently the only direct competitor to LIQ865 on the market, Durect Corporation, Innocoll Holdings plc and Heron Therapeutics, Inc. each have products in the pipeline that are potential competitors to LIQ865, which are estimated to enter the market in 2018 or 2019, and generic equivalents of EXPAREL may enter the market following the expiry of EXPAREL's patent in 2018. If we are unable to maintain our competitive position, our business and prospects will be materially and adversely affected. See "Business — Competition" for further details.

The pharmaceutical industry is subject to rapid technological change, which could affect the commercial viability of our products.

The pharmaceutical industry is subject to rapid and significant technological change. Research, discoveries or inventions by others may result in medical insights or breakthroughs which render our products less competitive or even obsolete. Furthermore, there may be breakthroughs of new pharmaceutical technologies which may become superior to our PRINT technology that may result in the loss of our commercial advantage. Our future success will, in part, depend on our ability to, among others:

- § develop or license new technologies that address the changing needs of the medical community; and
- § respond to technological advances and changing industry standards and practices in a cost-effective and timely manner.

Developing technology entails significant technical and business risks and substantial costs. We cannot assure you that we will be able to utilize new technologies effectively or that we will be able to adapt our existing technologies to changing industry standards in a timely or cost-effective manner, or at all. If we are unable to keep up with advancements in technology, our competitive position may suffer and our business and prospects may be materially and adversely affected.

Risks Related to our Business Operations

If we are unable to establish licensing and collaboration arrangements with other pharmaceutical companies on acceptable terms, or at all, we may not be able to develop and commercialize additional product candidates using our PRINT technology.

We have collaborated, and will continue to collaborate, with, among others, pharmaceutical companies such as GSK to expand the applications for our PRINT technology through licensing as well as joint product development arrangements. In addition, if we are able to obtain marketing approval for our product candidates from non-U.S. regulatory authorities, we intend to enter into strategic relationships with international collaborators for the commercialization of such products outside of the United States.

Collaboration and licensing arrangements are complex and time-consuming to negotiate, document, implement and maintain. We may not be successful in our efforts to establish collaboration or other alternative arrangements should we so choose to enter into such arrangements. In addition, the terms of any collaboration or other arrangements that we may enter into may not be favorable to us or may restrict our ability to enter into further collaboration or other arrangements with others. For example, collaboration agreements may contain exclusivity arrangements which limit our ability to work with other pharmaceutical companies to expand the applications for our PRINT technology, as in the case of our exclusivity arrangements with GSK.

If we are unable to establish licensing and collaboration arrangements or the terms of such agreements we enter into are unfavorable to us or restrict our ability to work with other pharmaceutical companies, we may not be able to expand the applications for our PRINT technology or commercialize our approved products, and our business and prospects may be materially and adversely affected.

Our collaboration and licensing arrangements may not be successful.

Our collaboration and licensing arrangements, as well as any future collaboration and licensing arrangements that we may enter into, may not be successful. The success of our collaboration and licensing arrangements will depend heavily on the efforts and activities of our collaborators, which are not within our control. We may, in the course of our collaboration and licensing arrangements, be subject to numerous risks, including, but not limited to, the following:

- § our collaborators, including GSK, may have significant discretion in determining the efforts and resources that they will contribute;
- § our collaborators, including GSK, may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- § our collaborators may independently, or in conjunction with others, develop products that compete directly or indirectly with our product candidates;
- § we may grant exclusive rights to our collaborators that would restrict us from collaborating with others;
- § our collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- § disputes may arise between us and our collaborators, which may cause a delay in or the termination of our research, development or commercialization activities;
- § our collaboration and licensing arrangements may be terminated, and if terminated, may result in our need for additional capital to pursue further drug product development or commercialization;
- § our collaborators may own or co-own certain intellectual property arising from our collaboration and licensing arrangements with them, which may restrict our ability to develop or commercialize such intellectual property; and
- § our collaborators may alter the strategic direction of their business or may undergo a change of control or management, which may affect the success of our collaboration arrangements with them.

We depend on third parties for clinical and commercial supplies, including a single supplier for the active ingredient of LIQ861.

We depend on third-party suppliers for clinical and commercial supplies, including the active pharmaceutical ingredients which are used in our product candidates. These supplies may not always be available to us at the standards we require or on terms acceptable to us, or at all, and we may not be able to locate alternative suppliers in a timely manner, or at all. If we are unable to obtain necessary clinical or commercial supplies, our manufacturing operations and clinical trials and the clinical trials of our collaborators may be delayed or disrupted and our business and prospects may be materially and adversely affected as a result.

For example, we currently rely on a sole supplier, LGM Pharma, LLC, or LGM Pharma, for treprostinil, the active pharmaceutical ingredient of LIQ861. If LGM Pharma is unable to supply treprostinil to us in the quantities we require, or at all, or otherwise defaults on its supply obligations to us, or if it ceases its relationship with us, we may not be able to obtain alternative supplies of treprostinil from other suppliers on acceptable terms, in a timely manner, or at all. Furthermore, LIQ861 is administered using RS00 Model 8

DPI, a DPI manufactured by Plastiap S.p.A. We purchase treprostinil and our DPI supply pursuant to purchase orders and do not have long-term contracts with either supplier. In the event of any prolonged disruption to our supply of treprostinil or the manufacture and supply of RS00 Model 8 DPI, our ability to develop and commercialize, and the timeline for commercialization of, LIQ861 may be adversely affected.

Our operations are concentrated in Morrisville, North Carolina and interruptions due to natural disasters or other unforeseen events could materially and adversely affect our operations.

All of our current operations are concentrated in Morrisville, North Carolina. A fire, flood, hurricane, earthquake or other disaster or unforeseen event resulting in significant damage to our facilities could significantly disrupt or curtail or require us to cease our operations.

It would be difficult, costly and time-consuming to transfer resources from one facility to another or to repair or replace our facility in the event that it is significantly damaged. In addition, our insurance may not be sufficient to cover all of our losses and may not continue to be available to us on acceptable terms, or at all.

In addition, if one of our suppliers experiences a similar disaster or unforeseen event, we could face significant delays in obtaining our supplies or be required to source for supplies from an alternative supplier and may incur substantial costs as a result. Any significant uninsured loss, prolonged or repeated disruption to operations or inability to operate, experienced by us or by our suppliers could materially and adversely affect our business, financial condition and results of operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

We may be exposed to claims and may not be able to obtain or maintain adequate product liability insurance.

Our business is exposed to the risk of product liability and other liability risks that are inherent in the development, manufacture, clinical testing and marketing of pharmaceutical products. These risks exist even if a product is approved for commercial sale by the FDA or comparable regulatory authorities in other countries and manufactured in licensed facilities. Our current product candidates, LIQ861 and LIQ865, are

designed to affect important bodily functions and processes. Any side effects, manufacturing defects, misuse or abuse associated with our products could result in injury to a patient or even death.

Claims that are successfully brought against us could have a material and adverse effect on our financial condition and results of operations. Further, even if we are successful in defending claims brought against us, our reputation could suffer. Regardless of merit or eventual outcome, product liability claims may also result in, among others:

- § a decreased demand for our products;
- § a withdrawal or recall of our products from the market;
- § a withdrawal of participants from our ongoing clinical trials;
- § the distraction of our management's attention from our core business activities to defend such claims;
- § additional costs to us; and
- § a loss of revenue.

Our insurance may not provide adequate coverage against our potential liabilities. Furthermore, we, our collaborators or our licensees may not be able to obtain or maintain insurance on acceptable terms, or at all. In addition, our collaborators or licensees may not be willing to indemnify us against these types of liabilities and may not themselves be sufficiently insured or have sufficient assets to satisfy any product liability claims. To the extent that they are uninsured or uninsurable, claims or losses that may be suffered by us, our collaborators or our licensees may have a material and adverse effect on our financial condition and results of operations.

We depend on skilled labor, and our business and prospects may be adversely affected if we lose the services of our skilled personnel, including those in senior management, or are unable to attract new skilled personnel.

Our ability to continue our operations and manage our potential future growth depends on our ability to hire and retain suitably skilled and qualified employees, including those in senior management, in the long term. Due to the specialized nature of our work, there is a limited supply of suitable candidates. We compete with other biotechnology and pharmaceutical companies, educational and research institutions and government entities, among others, for research, technical and clinical personnel. In addition, in order to manage our potential future growth effectively, we will need to improve our financial controls and systems and, as necessary, recruit sales, marketing, managerial and finance personnel. If we are unable to attract and retain skilled personnel, including those in senior management, including Neal Fowler, our Chief Executive Officer, and Kevin Gordon, our President and Chief Financial Officer, our business and prospects may be materially and adversely affected.

Our employees and our independent contractors, principal investigators, contract research organizations, or CROs, consultants or commercial collaborators, as well as their respective sub-contractors, if any, may engage in misconduct or fail to comply with certain regulatory standards and requirements, which could expose us to liability and adversely affect our reputation.

Our employees and our independent contractors, principal investigators, CROs, consultants or commercial collaborators, as well as their respective sub-contractors, if any, may engage in fraudulent conduct or other illegal activity, which may include intentional, reckless or negligent conduct that violates, among others, (a) FDA laws and regulations, or those of comparable regulatory authorities in other countries, including those laws that require the reporting of true, complete and accurate information to the FDA, (b) manufacturing standards, (c) healthcare fraud and abuse laws or (d) laws that require the true, complete and accurate reporting of financial information or data. For example, such persons may improperly use or misrepresent information obtained in the course of our clinical trials, create fraudulent data in our preclinical studies or clinical trials or misappropriate our drug products, which could result in regulatory

sanctions being imposed on us and cause serious harm to our reputation. It is not always possible for us to identify or deter misconduct by our employees and third parties, and any precautions we may take to detect or prevent such misconduct may not be effective. Any misconduct or failure by our employees and our independent contractors, principal investigators, CROs, consultants or commercial collaborators, as well as their respective sub-contractors, if any, to comply with the applicable laws or regulations may expose us to governmental investigations, other regulatory action or lawsuits. If any action is instituted against us as a result of the alleged misconduct of our employees or other third parties, regardless of the final outcome, our reputation may be adversely affected and our business may suffer as a result. If we are unsuccessful in defending against any such action, we may also be liable to significant fines or other sanctions, which could have a material and adverse effect on us.

We may acquire businesses, products or product candidates, or form strategic alliances or create joint ventures, in the future, and we may not realize the benefits of such transactions.

We may acquire additional businesses, products or product candidates, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business, although we have no current agreements, commitments or understandings to do so. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new products or product candidates resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, strategic alliance or joint venture, we will achieve the expected synergies to justify the transaction.

System failures may disrupt our business operations and delay our product development programs and commercialization activities.

Our systems, including computer systems, and those of our collaborators, contractors and consultants are vulnerable to, among others, unauthorized access, equipment failure and damage from computer viruses as well as cyber hackers. In the event of a material system failure or security breach of, or significant damage to, our systems, our business operations may be disrupted, and our product development programs and commercialization activities may be delayed. For example, failure of or damage to equipment leading to a loss of our clinical trial data could result in delays to the process of obtaining marketing approval for our product candidates, as well as significant and unexpected expenditure to recover or reproduce the lost data. To the extent that any disruption or damage to or security breach of the systems of our collaborators, contractors or consultants results in a loss of our data or applications, or the disclosure of our confidential information, our business may be adversely affected.

Risks Related to the Development and Commercialization of our Product Candidates

The marketing approval processes of the FDA and comparable regulatory authorities in other countries are unpredictable and our product candidates may be subject to multiple rounds of review or may not receive marketing approval.

We have not previously submitted an NDA to the FDA or similar drug approval filings to comparable regulatory authorities in other countries for any product candidate, and we cannot assure you that any of our product candidates will receive marketing approval.

Filing an application and obtaining marketing approval for a pharmaceutical product candidate is an extensive, lengthy, expensive and inherently uncertain process, and regulatory authorities may delay, limit or deny approval of our product candidates for many reasons, including, but not limited to, the following:

- § the FDA or comparable regulatory authorities in other countries may refuse to file an NDA or similar drug approval filing if they deem the application to be incomplete;

- § the FDA or comparable regulatory authorities in other countries may disagree with the design, scope or implementation of our clinical trials;
- § we may be unable to demonstrate to the satisfaction of the FDA or comparable regulatory authorities in other countries that our product candidate is safe and effective for its proposed indication, or that its clinical and other benefits outweigh its safety risks;
- § the results of our clinical trials may not meet the level of statistical significance required by the FDA or comparable regulatory authorities in other countries;
- § the FDA or comparable regulatory authorities in other countries may disagree with the number, design, size, conduct or statistical analysis of one or more of our clinical trials;
- § the FDA or comparable regulatory authorities in other countries may disagree with our interpretation of data from our preclinical studies or clinical trials;
- § the data collected from our clinical trials may not be sufficient to support the submission of an NDA or similar drug approval filing to the FDA or comparable regulatory authorities in other countries;
- § the FDA or comparable regulatory authorities in other countries may not approve of our manufacturing processes or facilities or those of our third-party manufacturers, which would be required to be corrected prior to marketing approval;
- § the FDA or comparable regulatory authorities in other countries may require development of a costly and extensive risk evaluation and mitigation strategy, or REMS, as a condition of approval;
- § the success or further approval of competing products approved in indications similar to those of our product candidates may change the standards for approval of our product candidates in their proposed indications; and
- § the approval policies of the FDA or comparable regulatory authorities in other countries may change in a manner that renders our clinical data insufficient for approval.

In addition, the FDA or comparable regulatory authorities in other countries may, in their sole discretion, change their views in respect of regulatory pathways they had previously affirmed or clinical trial protocols they were previously not opposed to. While we have consulted with the FDA on the appropriate regulatory pathway and clinical trial protocols for our product candidates, LIQ861 and LIQ865, we cannot assure you that the FDA will not revise their position significantly at a later date. In the event that this occurs, the clinical development and commercialization of our product candidates may be delayed or even derailed.

Even if we obtain marketing approval, the FDA or comparable regulatory authorities in other countries may approve our product candidates for fewer or more limited indications than what we requested approval for, or may include safety warnings or other restrictions that may negatively impact the commercial viability of our product candidates. Likewise, regulatory authorities may grant approval contingent on the performance of costly post-marketing clinical trials or the conduct of an expensive REMS, which could significantly reduce the potential for commercial success or viability of our product candidates. We also may not be able to find acceptable collaborators to manufacture our approved drug products in commercial quantities and at acceptable prices, or at all.

We may be unable to continually develop a pipeline of product candidates, which could affect our business and prospects.

A key element of our long-term strategy is to continually develop a pipeline of product candidates by developing proprietary innovations to FDA-approved drug products using our PRINT technology. If we are unable to identify off-patent drug products that we can develop proprietary innovations using our PRINT technology or otherwise expand our product candidate pipeline, whether through licensed or co-development opportunities, and obtain marketing approval for such product candidates within the timeframes that we anticipate, or at all, our business and prospects may be materially and adversely affected.

Our preclinical studies and clinical trials may not be successful and delays to such preclinical studies or clinical trials may cause our costs to increase and significantly impair our ability to commercialize our product candidates.

Before we are able to commercialize our drug products, we are required to undertake extensive preclinical studies and clinical trials to demonstrate that our drug products are safe and effective for their intended uses. However, we cannot assure you that our drug products will, in preclinical studies and clinical trials, demonstrate the safety and efficacy traits necessary to obtain marketing approval. Due to the nature of drug product development, many product candidates, especially those in early stages of development, may be terminated during development. We have not successfully completed the clinical development of any of our product candidates and, accordingly, do not have a track record of successfully bringing product candidates to market. Furthermore, LIQ861 and LIQ865 have, to date, been tested only in relatively small study populations and, accordingly, the results from our earlier clinical trials may be less reliable than results achieved in larger clinical trials.

Preclinical studies and clinical trials may fail due to factors such as flaws in trial design, dose selection and patient enrollment criteria. The results of preclinical studies and early clinical trials may not be indicative of the results of subsequent clinical trials. Product candidates may, in later stages of clinical testing, fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and earlier clinical trials. Moreover, there may be significant variability in safety or efficacy results between different trials of the same product candidate due to factors including, but not limited to, changes in trial protocols, differences in the composition of the patient population, adherence to the dosing regimen and other trial protocols and the rate of drop-out among patients in a clinical trial. If our preclinical studies or clinical trials are not successful and we are unable to bring our product candidates to market as a result, our business and prospects may be materially and adversely affected.

Furthermore, conducting preclinical studies and clinical trials is a costly and time-consuming process. The length of time required to conduct the required studies and trials may vary substantially according to the type, complexity, novelty and intended use of the product candidate. A single clinical trial may take up to several years to complete. Moreover, our preclinical studies and clinical trials may be delayed or halted due to various factors, including, among others:

- § delays in raising the funding necessary to initiate or continue a clinical trial;
- § delays in manufacturing sufficient quantities of product candidates for clinical trials;
- § delays in reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites;
- § delays in obtaining institutional review board approval at clinical trial sites;
- § delays in recruiting suitable patients to participate in a clinical trial;
- § delays in patients' completion of clinical trials or their post-treatment follow up;
- § regulatory authorities' interpretation of our preclinical and clinical data; and
- § unforeseen safety issues, including a high and unacceptable severity, or prevalence, of undesirable side effects or adverse events caused by our product candidates or similar drug products or product candidates.

If our preclinical studies or clinical trials are delayed, the commercialization of our product candidates will be delayed and as a result, we may incur substantial additional costs or not be able to recoup our investment in the development of our product candidates, which would have a material and adverse effect on our business.

We are planning to pursue the FDA 505(b)(2) pathway for all of our current product candidates. If we are unable to rely on the 505(b)(2) regulatory pathway to apply for marketing approval of our product candidates in the United States, seeking approval of these product candidates through the 505(b)(1) new drug application, or NDA, pathway would require full reports of investigations of safety and effectiveness, and the process of obtaining marketing approval for our product candidates would likely be significantly longer and more costly.

Our business model is to develop our own drug products in addition to collaborating with, among others, pharmaceutical companies such as GSK to develop drug products. We are currently focused on developing drug products that can be approved under abbreviated regulatory pathways in the United States, such as the 505(b)(2) regulatory pathway, which permits the filing of an NDA where at least some of the information required for approval comes from studies that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference. Section 505(b)(2), if applicable to us, would allow an NDA we submit to the FDA to rely in part on data in the public domain or the FDA's prior conclusions regarding the safety and effectiveness of approved compounds, which could expedite the development program for a product candidate by potentially decreasing the amount of clinical data that we would need to generate in order to obtain FDA approval. We plan to pursue this pathway for our current product candidates. Even if the FDA allows us to rely on the 505(b)(2) regulatory pathway, we cannot assure you that such marketing approval will be obtained in a timely manner, or at all.

The FDA may require us to perform additional clinical trials to support any change from the reference listed drug, which could be time-consuming and substantially delay our receipt of marketing approval. Also, as has been the experience of others in our industry, our competitors may file citizens' petitions with the FDA to contest approval of our NDA, which may delay or even prevent the FDA from approving any NDA that we submit under the 505(b)(2) regulatory pathway. If an FDA decision or action relative to our product candidate, or the FDA's interpretation of Section 505(b)(2) more generally, is successfully challenged, it could result in delays or even prevent the FDA from approving a 505(b)(2) application for our product candidates. Even if we are able to utilize the 505(b)(2) regulatory pathway, a drug approved via this pathway may be subject to the same post-approval limitations, conditions and requirements as any other drug.

In addition, we may face patent infringement lawsuits in relation to our NDAs submitted under the 505(b)(2) regulatory pathway, which may further delay or prevent the review or approval of our product candidates. The pharmaceutical industry is highly competitive, and 505(b)(2) NDAs are subject to special requirements designed to protect the patent rights of sponsors of previously approved drugs that are referenced in a 505(b)(2) NDA. A claim by the applicant that a patent is invalid or will not be infringed is subject to challenge by the patent holder, requirements may give rise to patent litigation and mandatory 30-month delays in approval of a 505(b)(2) application. It is not uncommon for a manufacturer of an approved product to file a citizen petition with the FDA seeking to delay approval of, or impose additional approval requirements for, pending competing products. If successful, such petitions can significantly delay, or even prevent, the approval of the new product. However, even if the FDA ultimately denies such a petition, the FDA may substantially delay approval while it considers and responds to the petition.

If the FDA determines that our product candidates do not qualify for the 505(b)(2) regulatory pathway, we would need to reconsider our plans and might not be able to commercialize our product candidates in a cost-efficient manner, or at all. If we were to pursue approval under the 505(b)(1) NDA pathway, we would be subject to more extensive requirements and risks such as conducting additional clinical trials, providing additional data and information or meeting additional standards for marketing approval. As a result, the time and financial resources required to obtain marketing approval for our product candidates would likely increase substantially and further complications and risks associated with our product candidates may arise. Also, new competing products may reach the market faster than ours, which may materially and adversely affect our competitive position, business and prospects.

Product candidates that the FDA deems to be combination products, such as LIQ861, or that otherwise rely on innovative drug delivery systems, may face additional challenges, risks and delays in the product development and regulatory approval process.

The FDA has indicated that it considers LIQ861, which is delivered by a DPI, to be a drug-device combination product and, accordingly, the DPI will be evaluated as part of our NDA filing. When evaluating products that utilize a specific drug delivery system or device, the FDA will evaluate the characteristics of that delivery system and its functionality, as well as the potential for undesirable interactions between the drug and the delivery system, including the potential to negatively impact the safety or effectiveness of the drug. The FDA review process can be more complicated for combination products, and may result in delays, particularly if novel delivery systems are involved. We rely on third parties for the design and manufacture of the delivery systems for our products, including the DPI for LIQ861, and in some cases for the right to refer to their data on file with the FDA or other regulators. Quality or design concerns with the delivery system, or commercial disputes with these third parties, could delay or prevent regulatory approval and commercialization of our product candidates.

Our product candidates are based on our proprietary, novel technology, PRINT, which makes it difficult to predict the time and cost of development and of subsequently obtaining regulatory approval.

Our future success depends on the successful development of our PRINT technology and products based on it, including LIQ861 and, to a lesser degree, LIQ865. To our knowledge, no regulatory authority has granted approval to any person or entity, including us, to market and commercialize drugs using our novel delivery system. We may never receive approval to market and commercialize any product candidate that uses PRINT.

We may encounter difficulties in enrolling patients in our clinical trials.

We may not be able to commence or complete clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials.

Patient enrollment may be affected by, among others:

- § the severity of the disease under investigation;
- § the design of the clinical trial protocol;
- § the size and nature of the patient population;
- § eligibility criteria for the clinical trial in question;
- § the perceived risks and benefits of the product candidate under clinical testing, including a high and unacceptable severity, or prevalence, of undesirable side effects or adverse events caused by our product candidates or similar products or product candidates;
- § the existing body of safety and efficacy data in respect of the product candidate under clinical testing;
- § the proximity of patients to clinical trial sites; and
- § the number and nature of competing therapies and clinical trials.

Any negative results we may report in clinical trials of our product candidates may also make it difficult or impossible to recruit and retain patients in other clinical trials of that same product candidate.

In particular, we will be required to identify and enroll a sufficient number of patients with PAH for the Phase 3 clinical trial of LIQ861. PAH is a rare disease with a relatively small patient population, and our enrollment of clinical trial participants may be slow as a result. Furthermore, we are aware of a number of therapies for PAH that are being developed or that are already available on the market, and we expect to face competition from these investigational drugs or approval drugs for potential subjects in our clinical trials, which may delay enrollment in our planned clinical trials.

Delays or failures in planned patient enrollment or retention may result in increased costs, program delays, or both. We may, as a result of such delays or failures, be unable to carry out our clinical trials as planned or within the timeframe that we expect or at all, and our business and prospects may be materially and adversely affected as a result.

If a competitor obtains orphan drug designation from the FDA for the same drug and same indication as we are seeking for a product candidate, and then obtains approval of that drug for that condition before we do, the resulting FDA exclusivity would significantly delay our ability to commercialize that product candidate.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition—generally a disease or condition that affects fewer than 200,000 individuals in the United States or that affects more than 200,000 individuals in the United States and for which there is no reasonable expectation that costs of research and development of the drug for the indication can be recovered by sales of the drug in the United States. Orphan drug designation must be requested before submitting an NDA.

After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. The first applicant to receive FDA approval for a particular active ingredient to treat a particular disease or condition with orphan drug designation is entitled to a seven-year exclusive marketing period in the United States for that product in that indication. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA application user fee.

During the exclusivity period, the FDA may not approve any other applications to market the same drug for the same disease or condition, except in limited circumstances, such as if the second applicant demonstrates the clinical superiority of its product to the product with orphan drug exclusivity through a demonstration of superior safety, superior efficacy or a major contribution to patient care, or if the manufacturer of the product with orphan exclusivity is not able to assure sufficient quantities of the product. "Same drug" means a drug that contains the same identity of the active moiety if it is a drug composed of small molecules, or of the principal molecular structural features if it is composed of macromolecules and is intended for the same use as a previously approved drug, except that if the subsequent drug can be shown to be clinically superior to the first drug, it will not be considered to be the same drug. Drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition.

We have conducted, and may in the future conduct, clinical trials for our product candidates outside the United States and the FDA may not accept data from such trials.

Although the FDA may accept data from clinical trials conducted outside the United States in support of safety and efficacy claims for our product candidates, if not conducted under an IND, this is subject to certain conditions set out in 21 C.F.R. § 312.120. For example, in order for the FDA to accept data from such a foreign clinical trial, the study must have been conducted in accordance with Good Clinical Practice, or GCP, including review and approval by an independent ethics committee and obtaining the informed consent from subjects of the clinical trials. The FDA must also be able to validate the data from the study through an onsite inspection if the agency deems it necessary. In addition, foreign clinical data submitted to support FDA applications should be applicable to the U.S. population and U.S. medical practice. Other factors that may affect the acceptance of foreign clinical data include differences in clinical conditions, study populations or regulatory requirements between the United States and the foreign country.

We conducted the early Phase 1 clinical trial of LIQ865 in Denmark, and not under an IND, and may, in the future, conduct the clinical trials of our product candidates outside the United States. The FDA may not accept such foreign clinical data, and in such event, we may be required to re-conduct the relevant clinical

trials within the United States, which would be costly and time-consuming, and which could have a material and adverse effect on our ability to carry out our business plans.

We rely on third parties to conduct our preclinical studies and clinical trials.

We currently rely on, and plan to continue to rely on, third-party CROs to monitor and manage data for our preclinical studies and clinical trials. However, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable regulatory standards and our reliance on CROs does not relieve us of our regulatory responsibilities.

The CROs on which we rely are required to comply with FDA regulations (and the regulations of comparable regulatory authorities in other countries) regarding GCP. Regulatory authorities enforce GCP standards through periodic inspections. If any of the CROs on which we rely fail to comply with the applicable GCP standards, the clinical data generated in our clinical trials may be deemed unreliable. While we have contractual agreements with these CROs, we have limited influence over their actual performance and cannot control whether or not they devote sufficient time and resources to our preclinical studies and clinical trials. A failure to comply with the applicable regulations in the conduct of the preclinical studies and clinical trials for our product candidates may require us to repeat such studies or trials, which would delay the process of obtaining marketing approval for our product candidates and have a material and adverse effect on our business and prospects.

Some of our CROs have the ability to terminate their respective agreements with us if, among others, it can be reasonably demonstrated that the safety of the patients participating in our clinical trials warrants such termination. If any of our agreements with our CROs is terminated, and if we are not able to enter into agreements with alternative CROs on acceptable terms or in a timely manner, or at all, the clinical development of our product candidates may be delayed and our development expenses could be increased.

Our facilities are subject to extensive and ongoing regulatory requirements and failure to comply with these regulations may result in significant liability.

Our company and our facilities are subject to payment of fees, ongoing review and periodic inspections by the FDA and other regulatory authorities for compliance with quality system regulations, including the FDA's current good manufacturing practices, or cGMP, requirements. These regulations cover all aspects of the manufacturing, testing, quality control and record-keeping of our drug products. Furthermore, the facilities where our product candidates are manufactured may be subject to inspection by the FDA before we can obtain marketing approval and remain subject to periodic inspection even after our product candidates have received marketing approval. Suppliers of components and materials such as active pharmaceutical ingredients, used to manufacture our drug products are also required to comply with the applicable regulatory standards.

The manufacture of pharmaceutical products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. We and any contract manufacturers that we may engage in the future must comply with cGMP requirements. Manufacturers of pharmaceutical products often encounter difficulties in production, particularly in scaling up and validating initial production and contamination controls. These problems include difficulties with production costs and yields, quality control, including stability of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. Furthermore, if microbial, viral or other contaminations are discovered in our product candidates or in the manufacturing facilities in which our product candidates are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

Compliance with these regulatory standards often requires significant expense and effort. If we or our suppliers are unable to comply with the applicable regulatory standards or take satisfactory corrective steps

in response to adverse results of an inspection, this could result in enforcement action, including, among others, the issue of a public warning letter, a shutdown of or restrictions on our or our suppliers' manufacturing operations, delays in approving our drug products and refusal to permit the import or export of our drug products. Any adverse regulatory action taken against us could subject us to significant liability and harm our business and prospects.

Our current pipeline product candidates, LIQ861 and LIQ865, require extensive clinical data analysis, regulatory review and additional testing. Clinical trials and data analysis can be very expensive, time-consuming and difficult to design and implement. If we are unsuccessful in obtaining regulatory approval for LIQ861 or LIQ865, or any of our product candidates do not provide positive results, we may be required to delay or abandon development of such product, which would have a material adverse impact on our business.

Continuing product development requires additional and extensive clinical testing. Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. The clinical trial process is also time-consuming. We cannot provide any assurance or certainty regarding when we might receive regulatory approval for LIQ861 or LIQ865. Furthermore, failure can occur at any stage of the process, and we could encounter problems that cause us to abandon an NDA filed with the FDA or repeat clinical trials. The commencement and completion of clinical trials for any current or future development product candidate may be delayed by several factors, including:

- § unforeseen safety issues;
- § determination of dosing issues;
- § lack of effectiveness during clinical trials;
- § slower than expected rates of patient recruitment;
- § inability to monitor patients adequately during or after treatment; and
- § inability or unwillingness of medical investigators to follow our clinical protocols.

In addition, the FDA or an independent institutional review board, or IRB, may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in our IND submissions or the conduct of these trials. Therefore, we cannot provide any assurance or predict with certainty the schedule for future clinical trials. In the event we do not ultimately receive regulatory approval for LIQ861 and LIQ865, we may be required to terminate development of our only product candidates.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial potential or result in significant negative consequences following any potential marketing approval.

If our product candidates are associated with undesirable side effects or have characteristics that are unexpected, we may need to abandon our development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Any serious adverse or undesirable side effects identified during the development of our product candidates, could interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications, and in turn prevent us from commercializing our product candidates and generating revenues from their sale. In addition, if any of our product candidates receive regulatory approval and we or others later identify undesirable adverse effects caused by the product, we could face one or more of the following consequences:

- § regulatory authorities may require the addition of labeling statements, such as a boxed warning or a contraindication, or other safety labeling changes;
- § regulatory authorities may require a REMS;

- § regulatory authorities may withdraw their approval of the product;
- § regulatory authorities may seize the product;
- § we may be required to change the way that the product is administered, or conduct additional clinical trials or we may need to recall the product;
- § we may be subject to litigation or product liability claims fines, injunctions or criminal penalties; and
- § our reputation may suffer.

Even if we obtain marketing approval for our product candidates in the United States, we or our collaborators may not obtain marketing approval for the same product candidates elsewhere.

We may enter into strategic collaboration arrangements with third parties to commercialize our product candidates outside of the United States. In order to market any product candidate outside of the United States, we or our collaborators will be required to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be recognized or accepted by regulatory authorities in other countries, and obtaining marketing approval in one country does not mean that marketing approval will be obtained in any other country. Approval processes vary among countries and additional product testing and validation, or additional administrative review periods, may be required from one country to the next.

Seeking marketing approval in countries other than the United States could be costly and time-consuming, especially if additional preclinical studies or clinical trials are required to be conducted. We currently do not have any product candidates approved for sale in any jurisdiction, including non-U.S. markets, and we do not have the experience in obtaining marketing approval in non-U.S. markets. We currently also have not identified any collaborators to market our products outside of the United States and cannot assure you that such collaborators, even if identified, will be able to successfully obtain marketing approval for our product candidates outside of the United States. If we or our collaborators fail to obtain marketing approval in non-U.S. markets, or if such approval is delayed, our target market may be reduced, and our ability to realize the full market potential of our products will be adversely affected.

The terms of approvals, ongoing regulations and post-marketing restrictions for our products may limit how we manufacture and market our products, which could materially impair our ability to generate revenue.

Once marketing approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. The FDA closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling and regulatory requirements. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use, and if we do not restrict the marketing of our products only to their approved indications, we may be subject to enforcement action for off-label marketing. We and any potential collaborators we may have in the future, must therefore comply with requirements concerning advertising and promotion for any of our products for which we or our collaborators obtain marketing approval. Thus, if either of our current product candidates receive marketing approval, the accompanying label may limit the approved use of our product, which could limit sales of the product.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements, such as ensuring that quality control and manufacturing procedures conform to cGMP applicable to drug manufacturers, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, any contract manufacturers we may engage in the future, our future collaborators, licensees and their contract manufacturers will also be subject to other regulatory requirements, including submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements regarding the distribution of samples to clinicians, recordkeeping

and costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product such as the requirement to implement a risk evaluation and mitigation strategy.

Our products may not achieve market acceptance.

Our business model is to develop our own drug products in addition to collaborating with, among others, pharmaceutical companies such as GSK to develop drug products. We are currently focused on developing drug products that can be approved under abbreviated regulatory pathways in the United States, such as the 505(b)(2) regulatory pathway, which allows us to rely on existing knowledge of the safety and efficacy of the relevant reference listed drugs to support our applications for approval in the United States. While we believe that it will be less difficult for us to convince physicians, patients and other members of the medical community to accept and use our drug products as compared to entirely new drugs, our drug products may nonetheless fail to gain sufficient market acceptance by physicians, patients, other healthcare providers and third-party payors. If any of our drug products fail to achieve sufficient market acceptance, we may not be able to generate sufficient revenue to become profitable. The degree of market acceptance of our drug products, if and when they are approved for commercial sale, will depend on a number of factors, including but not limited to:

- § the timing of our receipt of marketing approvals, the terms of such approvals and the countries in which such approvals are obtained;
- § the safety, efficacy, reliability and ease of administration of our drug products;
- § the prevalence and severity of undesirable side effects and adverse events;
- § the extent of the limitations or warnings required by the FDA or comparable regulatory authorities in other countries to be contained in the labeling of our drug products;
- § the clinical indications for which our drug products are approved;
- § the availability and perceived advantages of alternative therapies;
- § any publicity related to our drug products or those of our competitors;
- § the quality and price of competing drug products;
- § our ability to obtain third-party payor coverage and sufficient reimbursement;
- § the willingness of patients to pay out of pocket in the absence of third-party payor coverage; and
- § the selling efforts and commitment of our commercialization collaborators.

If our approved drug products fail to receive a sufficient level of market acceptance, our ability to generate revenue from sales of our drug products will be limited, and our business and results of operations may be materially and adversely affected.

The commercial success of our drug products depends on the availability and sufficiency of third-party payor coverage and reimbursement.

Patients in the United States and elsewhere generally rely on third-party payors to reimburse part or all of the costs associated with their prescription drugs. Accordingly, market acceptance of our drug products is dependent on the extent to which third-party coverage and reimbursement is available from government health administration authorities (including in connection with government healthcare programs, such as Medicare and Medicaid in the United States), private healthcare insurers and other healthcare funding organizations.

Significant uncertainty exists as to the coverage and reimbursement status of any drug products for which we may obtain regulatory approval. Coverage decisions may not favor new drug products when more established or lower-cost therapeutic alternatives are already available. Even if we obtain coverage for a given drug product, the associated reimbursement rate may not be adequate to cover our costs, including research, development, intellectual property, manufacture, sale and distribution expenses, or may require

co-payments that patients find unacceptably high. Patients are unlikely to use our products unless reimbursement is adequate to cover all or a significant portion of the cost of our drug products.

Coverage and reimbursement policies for drug products can differ significantly from payor to payor as there is no uniform policy of coverage and reimbursement for drug products among third-party payors in the United States. There may be significant delays in obtaining coverage and reimbursement as the process of determining coverage and reimbursement is often time-consuming and costly which will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage or adequate reimbursement will be obtained. It is difficult to predict at this time what government authorities and third-party payors will decide with respect to coverage and reimbursement for our drug products.

The market for our product candidates will depend significantly on access to third-party payors' drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. Competition to be included in such formularies often leads to downward pricing pressures. In particular, third-party payors may refuse to include a particular reference listed drug in their formularies or otherwise restrict patient access to a reference listed drug when a less costly generic equivalent or other alternative is available. In particular, given that several therapeutically similar drug products to LIQ861, including oral and parenteral prostacyclins, are available on the market, managed care organizations may minimize the utilization of a new to market product and accordingly, we expect that LIQ861, if and when it is approved, will operate in a highly cost-constrained environment. Similarly, as there are a number of generic and branded therapeutic alternatives to LIQ865 in the post-operative pain market, there is a significant risk that we may not be placed on the formularies of key institutions and/or receive favorable reimbursement for LIQ865, if and when it is approved.

The U.S. government, state legislatures and foreign governmental entities have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and coverage and requirements for substitution of generic products for branded prescription drugs. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could exclude or limit our drugs products from coverage and limit payments for pharmaceuticals.

In addition, we expect that the increased emphasis on managed care and cost containment measures in the United States by third-party payors and government authorities to continue and will place pressure on pharmaceutical pricing and coverage. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more drug products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

If we are unable to obtain and maintain sufficient third-party coverage and adequate reimbursement for our drug products, the commercial success of our drug products may be greatly hindered and our financial condition and results of operations may be materially and adversely affected.

Our products may be subject to reduced prices negotiated by certain group purchasing organizations that could adversely impact our product revenue.

Our customers may organize with each other or with third parties, such as distributors, manufacturers or hospitals, to negotiate prices that are lower than we may have been able to obtain from each of them individually. In such event, our ability to generate any product revenue, and consequently, our results of operations may be materially and adversely affected.

We may not be able to build our marketing and sales capabilities or enter into agreements with third parties to market and sell our drug products.

In order to market and sell any of our approved drug products, we will be required to build our marketing and sales capabilities. We cannot assure you that we will be successful in doing so or be able to do so in a cost-effective manner. In addition, we may enter into collaboration arrangements with third parties to market our drug products outside of the United States. We may face significant competition for collaborators. In addition, collaboration arrangements may be time-consuming to negotiate and document. We cannot assure you that we will be able to negotiate collaborations for the marketing and sales of our drug products outside of the United States on acceptable terms, or at all. Even if we do enter into such collaborations, we cannot assure you that our collaborators will be successful in commercializing our products. If we or our collaborators are unable to successfully commercialize our drug products whether in the United States or elsewhere, our business and results of operations may be materially and adversely affected.

The off-label use or misuse of our products may harm our image in the marketplace, result in injuries that lead to costly product liability suits, or result in costly investigations and regulatory agency sanctions under certain circumstances if we are deemed to have engaged in the promotion of these uses, any of which could be costly to our business.

We are developing LIQ861 for the treatment of PAH and LIQ865 for the treatment of local post-operative pain. If our product candidates are cleared by the FDA for these specific indications, we may only promote or market our product candidates for their specifically cleared or approved indications. We will train our marketing and sales force against promoting our product candidates for uses outside of the cleared or 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 for these uses for which they are not approved. Furthermore, the use of our products for indications other than those approved by the FDA may not effectively treat such conditions, which could harm our reputation in the marketplace among physicians and patients.

If the FDA determines that our promotional materials or training constitute promotion of an off-label or other improper 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 or administrative penalties, damages, fines, disgorgement, exclusion from participation in government healthcare programs and the curtailment of our operations.

These regulations or codes may limit our ability to effectively market our products, or we could run afoul of the requirements imposed by these regulations, causing reputational harm and impose potentially substantial costs on us.

Even if we obtain regulatory approval for a product candidate, our products and business will remain subject to ongoing regulatory obligations and review.

If our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and comparable requirements outside of the United States. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS as a condition of approval of our product candidates, which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. We will also be required to report certain adverse reactions and production problems, if any, to the FDA or other regulatory agencies and to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have FDA or other regulatory agency approval. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical studies to verify the safety and efficacy of our product candidates in general or in specific patient subsets. An unsuccessful post-marketing study or failure to complete such a clinical study could result in the withdrawal of marketing approval. Furthermore, any new legislation addressing drug safety issues could result in delays in product development or commercialization or increased costs to assure compliance. Foreign regulatory authorities impose similar requirements. If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- § issue warning letters asserting that we are in violation of the law;
- § seek an injunction or impose civil or criminal penalties or monetary fines;
- § suspend or withdraw regulatory approval;
- § suspend any of our ongoing clinical trials;
- § refuse to approve pending applications or supplements to approved applications submitted by us or our strategic partners;
- § restrict the marketing or manufacturing of our products;
- § seize or detain products, or require a product recall;
- § refuse to permit the import or export of our product candidates; or
- § refuse to allow us to enter into government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our product candidates. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

If our product candidates are approved for commercialization outside of the United States, we may be exposed to a number of risks associated with international business operations.

If our product candidates are approved for commercialization outside of the United States, we may market our approved drug products ourselves, or we may enter into agreements with third parties to market the aforesaid drug products outside of the United States. In such event, we may be subject to risks related to international business operations, including, but not limited to:

- § varying levels of protection for intellectual property rights;
- § changes in tariffs and the imposition of trade barriers;
- § economic weakness, including inflation or political instability in particular foreign economies and markets;
- § compliance with tax, employment, immigration and labor laws in respect of employees living or traveling abroad;
- § foreign tax laws;
- § currency fluctuations; and
- § business interruptions resulting from geopolitical actions, such as wars and terrorist attacks, among others, or natural disasters, such as fires, floods, earthquakes and hurricanes, among others.

If the FDA or comparable regulatory authorities in other countries approve generic versions of our product candidates, or do not grant our product candidates a sufficient period of market exclusivity before approving their generic versions, our ability to generate revenue may be adversely affected.

Once an NDA is approved, the drug product covered will be listed as a reference listed drug in the FDA's Orange Book. In the United States, manufacturers of drug products may seek approval of generic versions of reference listed drugs through the submission of abbreviated new drug applications, or ANDAs. In support of an ANDA, a generic manufacturer is generally required to show that its product has the same active pharmaceutical ingredient(s), dosage form, strength, route of administration and conditions of use or labelling as the reference listed drug and that the generic version is bioequivalent to the reference listed drug. Generic drug products may be significantly less expensive to bring to market than the reference listed drug, and companies that produce generic drug products are generally able to offer them at lower prices. Thus, following the introduction of a generic drug product, a significant percentage of the sales of any reference listed drug may be lost to the generic drug product.

The FDA will not approve an ANDA for a generic drug product until the applicable period of market exclusivity for the reference listed drug has expired. The applicable period of market exclusivity varies depending on the type of exclusivity granted. A grant of market exclusivity is separate from the existence of patent protection and manufacturers may seek to launch generic versions of our drug products following the expiry of their respective marketing exclusivity periods, even if our drug products are still under patent protection at the relevant time.

Any competition that our product candidates may face, if and when such product candidates are approved for marketing and commercialized, from generic versions could substantially limit our ability to realize a return on our investment in the development of our product candidates and have a material and adverse effect on our business and prospects.

Our drug products may be subject to recalls, withdrawals, seizures or other enforcement actions by the FDA or comparable regulatory authorities in other countries if we fail to comply with regulatory requirements or previously unknown problems with our drug products are discovered after they reach the market.

The FDA or comparable regulatory authorities in other countries may withdraw approval of our drug products if we fail to maintain compliance with regulatory requirements or if problems occur after our drug products reach the market. The discovery of previously unknown problems with a drug product, including adverse events of unanticipated severity or frequency, problems with manufacturing processes or failure to comply with regulatory requirements, including the requirement to promote a drug product only for its approved indications and in accordance with the provisions of its approved label, may result in, among others:

- § restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- § warning letters or holds on post-approval clinical trials;
- § refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;
- § product seizure or detention, or refusal to permit the import or export of the product; or
- § injunctions or the imposition of civil or criminal penalties.

In the event that our drug products are subject to recalls, withdrawals, seizures or other enforcement actions by the FDA or comparable regulatory authorities, our reputation and demand for our drug products could be materially and adversely affected. In addition, we may incur significant and unexpected expenditure and management attention may be diverted in connection with any such recall, withdrawal, seizure or other enforcement action or any corrective action required to be taken, which could have a material and adverse impact on our business and financial condition.

We may not be able to respond effectively to changing consumer preferences and demand.

Our success depends, in part, on our ability to anticipate and respond to changing consumer trends and preferences in the pharmaceutical industry. We may not be able to respond to these changes in a timely or commercially effective manner or at all. Our failure to accurately predict these trends could negatively impact our inventory levels, sales and reputation. The commercial success of our drug products will depend upon a number of factors, including our ability to, among others:

- § anticipate consumers' therapeutic needs;
- § innovate, develop and commercialize new drug products in a timely manner;
- § competitively price our drug products;
- § procure and maintain our drug products in sufficient volumes and in a timely manner; and
- § differentiate our drug products from those of our competitors.

If we are unable to introduce new drug products, develop improvements to our existing drug products or maintain the appropriate inventory levels to meet our customers' demand in a timely manner or at all, our business and prospects could be materially and adversely affected.

We may not be able to engage third-party contract manufacturing organizations, or CMOs, to manufacture our approved drug products on a commercial scale to meet commercial demand for our drug products.

We may, in the future, rely on third-party CMOs or enter into manufacturing joint ventures with third parties to manufacture our approved drug products on a commercial scale. However, we cannot assure you that we will be able to contract with such third parties on acceptable terms, if at all, or that such third parties will satisfy our quality standards or meet our supply requirements in a timely manner, if at all. In addition, only a limited number of manufacturers are capable of supplying pharmaceutical products. The manufacturing process for our drug products will be highly regulated, and we will need to contract with manufacturers that can meet the relevant regulatory requirements on an ongoing basis. If the third-party manufacturers with

whom we contract fail to perform their obligations, we may not be able to meet commercial demand for our drug products, which would have a material and adverse impact on our business.

Risks Related to our Intellectual Property

Our commercial success depends largely on our ability to protect our intellectual property.

Our commercial success depends, in large part, on our ability to obtain and maintain patent protection and trade secret protection in the United States and elsewhere in respect of our product candidates and PRINT technology. If we fail to adequately protect our intellectual property rights, our competitors may be able to erode, negate or preempt any competitive advantage we may have. To protect our competitive position, we have filed and will continue to file for patents in the United States and elsewhere in respect of our product candidates and PRINT technology. The process of identifying patentable subject matter and filing a patent application is expensive and time-consuming. We cannot assure you that we will be able to file the necessary or desirable patent applications at a reasonable cost, in a timely manner, or at all. Further, since certain patent applications are confidential until patents are issued, third parties may have filed patent applications for subject matters covered by our pending patent applications without us being aware of such applications, and our patent applications may not have priority over patent applications of others. In addition, we cannot assure you that our pending patent applications will result in patents being obtained. The standards that patent offices in different jurisdictions use to grant patents are not always applied predictably or uniformly and may be changed.

Even if we have been or are able to obtain patent protection for our product candidates or PRINT technology, if the scope of such patent protection is not sufficiently broad, we may not be able to rely on such patent protection to prevent third parties from developing or commercializing our product candidates or technology. The enforceability of patents in the pharmaceutical industry involves complex legal and scientific questions and can be uncertain. Accordingly, we cannot assure you that third parties will not successfully challenge the validity, enforceability or scope of our patents. A successful challenge to our patents may lead to generic versions of our drug products being launched before the expiry of our patents or otherwise limit our ability to stop others from using or commercializing similar or identical products and technology, or the duration of the patent protection of our drug products and technology. If any of our patents are narrowed or invalidated, our business and prospects may be materially and adversely affected. In addition, we cannot assure you that we will be able to detect unauthorized use or take appropriate, adequate and timely actions to enforce our intellectual property rights. If we are unable to adequately protect our intellectual property, our business, competitive position and prospects may be materially and adversely affected.

Even if our patents or patent applications are unchallenged, they may not adequately protect our intellectual property or prevent third parties from designing around our claims. If the patent applications we file or may file do not lead to patents being granted or if the scope of any of our patent applications is challenged, we may face difficulties in developing our product candidates, companies may be dissuaded from collaborating with us, and our ability to commercialize our product candidates may be materially and adversely affected. We are unable to predict which of our patent applications will lead to patents or assure you that any of our patents will not be found invalid or unenforceable or challenged by third parties. The patents of others may prevent the commercialization of product candidates incorporating our technology. In addition, given the amount of time required for the development, clinical testing and regulatory review of new product candidates, the patent protecting our product candidates may expire before or shortly after such product candidates are commercialized, if at all.

Moreover, the issuance of a patent is not conclusive as to the inventorship of the patented subject matter, or its scope, validity or enforceability. We cannot assure you that all of the potentially relevant prior art, that is, any evidence that an invention is already known, relating to our patents and patent applications, has

been found. If such prior art exists, it may be used to invalidate a patent or may prevent a patent from being issued.

In addition, we, our collaborators or our licensees may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. As a result, we may miss potential opportunities to strengthen our patent position.

If we are unable to protect our trade secrets, the value of our PRINT technology and product candidates may be negatively impacted, which would have a material and adverse effect on our competitive position and prospects.

In addition to patent protection, we rely on trade secret protection to protect certain aspects of our intellectual property. While we require parties who have access to any portion of our trade secrets, such as our employees, consultants, advisers, CROs, CMOs, collaborators and other third parties, to enter into non-disclosure and confidentiality agreements with us, we cannot assure you that these parties will not disclose our proprietary information, including our trade secrets, in breach of their contractual obligations. Enforcing a claim that a party has illegally disclosed or misappropriated a trade secret is difficult, costly and time-consuming, and we may not be successful in doing so. If the steps we have taken to protect our trade secrets are deemed by the adjudicating court to be inadequate, we may not be able to obtain adequate recourse against a party for misappropriating our trade secrets.

Trade secrets can be difficult to protect as they may, over time, be independently discovered by our competitors or otherwise become known despite our trade secret protection. If any of our trade secrets were to be lawfully obtained or independently developed by our competitors, we would have no right to prevent such competitors, or those to whom they communicate such technology or information, from using that technology or information to compete with us. Such competitors could attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights.

If our trade secrets were to be disclosed to or independently developed by our competitors, our competitors may be able to exploit our PRINT technology to develop competing product candidates, and the value of our PRINT technology and our product candidates may be negatively impacted. This would have a material and adverse effect on our competitive position and prospects.

We rely on licenses to intellectual property that are owned by third parties.

We have entered and may, in the future, enter into license agreements with third parties to license the rights to use their technologies in our research, development and commercialization activities. License agreements generally impose various diligence, milestone payments, royalty, insurance and other obligations on us, and if we fail to comply with these obligations, our licensors may have the right to terminate these license agreements. Termination of these license agreements or the reduction or elimination of our licensed rights or the exclusivity of our licensed rights may have an adverse impact on, among others, our ability to develop and commercialize our product candidates. We cannot assure you that we will be able to negotiate new or reinstated licenses on commercially acceptable terms, or at all.

In addition, we license certain patent rights for our PRINT technology from The University of North Carolina at Chapel Hill, or UNC, under the UNC Amended and Restated License Agreement, dated as of December 15, 2008, as amended, or the UNC license. Under the UNC License, UNC has the right to terminate our license if we materially breach the agreement and fail to cure such breach within the stipulated time. In the event that UNC terminates our license and we have a product that relies on that license, it may bring a claim against us, and if they are successful, we may be required to compensate UNC for the unauthorized use of their patent rights through the payment of royalties.

Also, the agreements under which we license patent rights may not give us control over patent prosecution or maintenance, so that we may not be able to control which claims or arguments are presented and may not be able to secure, maintain or successfully enforce necessary or desirable patent protection from those patent rights. We do not have primary control over patent prosecution and maintenance for certain of the patents we license, and therefore cannot assure you that these patents and applications will be prosecuted or maintained in a manner consistent with the best interests of our business. We also cannot assure you that patent prosecution and maintenance activities by our licensors, if any, will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents.

Pursuant to the terms of some of our license agreements with third parties, some of our third-party licensors have the right, but not the obligation, in certain circumstances, to control the enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents. Even if we are permitted to pursue such enforcement or defense, we will require the cooperation of our licensors, and we cannot assure you that we will receive such cooperation on commercially acceptable terms, or at all. We also cannot assure you that our licensors will allocate sufficient resources or prioritize their or our enforcement of these patents or defense of these claims to protect our interests in the licensed patents. If we cannot obtain patent protection, or enforce existing or future patents against third parties, our competitive position, business and prospects may be materially and adversely affected.

Further, licenses to intellectual property may not always be available to us on commercially acceptable terms, or at all. In the event that the licenses we rely on are not available to us on commercially acceptable terms, or at all, our ability to commercialize our PRINT technology or product candidates, and our business and prospects, may be materially and adversely affected.

We may become involved in litigation to protect our intellectual property or enforce our intellectual property rights, which could be expensive, time-consuming and may not be successful.

Competitors may infringe our patents or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, we may engage in litigation to, among others, enforce or defend our intellectual property rights, determine the validity or scope of our intellectual property rights and those of third parties, and protect our trade secrets. Such actions may be time-consuming and costly and may divert our management's attention from our core business and reduce the resources available for our clinical development, manufacturing and marketing activities, and consequently have a material and adverse effect on our business and prospects, regardless of the outcome.

In addition, in an infringement proceeding, a court may decide that a patent owned by, or licensed to, us is invalid or unenforceable, or may refuse to stop the other party from using the technology in question on the ground that our patents do not cover such technology. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that our confidential information may be compromised by disclosure.

We may be subject to claims that our employees or consultants have wrongfully used or disclosed to us alleged trade secrets of their former employers or other clients.

As is common in our industry, a number of our employees, including our Chief Executive Officer and a number of our executive officers, were formerly employed by other biotechnology or pharmaceutical companies, including our competitors or potential competitors, among others, and may have entered into proprietary rights, non-disclosure and non-competition agreements or similar agreements, in connection with such previous employment. Moreover, we engage the services of scientific advisers and consultants to assist us in the development of our products, many of whom were previously employed at or may have previously been or are currently providing consulting or advisory services to, other biotechnology or pharmaceutical

companies, and who may have also entered into proprietary rights, non-disclosure and non-competition (or similar) agreements with such other companies.

While we require that our employees, scientific advisers and consultants do not use the proprietary information or know-how of others in their work for us, we cannot assure you that we will not be subject to claims that we or these employees, scientific advisers or consultants have inadvertently or otherwise used or disclosed the trade secrets or proprietary information of their former employers or former or present clients in their work for us, especially where such former employers or former or present clients are our competitors or potential competitors. Claims brought against us could cause us to incur unexpected and substantial costs, as well as divert our management's attention from our core business and reduce the resources available for our clinical development, manufacturing and marketing activities. Consequently, our business may be materially and adversely affected.

We may be subject to claims from third parties that our products infringe their intellectual property rights.

The pharmaceutical industry has experienced rapid technological change and obsolescence in the past, and our competitors have strong incentives to stop or delay any introduction of new drug products or related technologies by, among others, establishing intellectual property rights over their drug products or technologies and aggressively enforcing these rights against potential new entrants into the market. We expect that we and other industry participants will be increasingly subject to infringement claims as the number of competitors and drug products grows.

Our commercial success depends in large part upon our ability to develop, manufacture, market and sell our drug products or product candidates without infringing on the patents or other proprietary rights of third parties. It is not always clear to industry participants, including us, what the scope of a patent covers. Due to the large number of patents in issue and patent applications filed in our industry, there is a risk that third parties will claim that our products or technologies infringe their intellectual property rights.

Claims for infringement of intellectual property which are brought against us, whether with or without merit, and which are generally uninsurable, could result in time-consuming and costly litigation, diverting our management's attention from our core business and reducing the resources available for our drug product development, manufacturing and marketing activities, and consequently have a material and adverse effect on our business and prospects, regardless of the outcome. Moreover, such proceedings could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not being issued. We also may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Uncertainties resulting from the initiation and continuation of litigation or other proceedings could also have a material and adverse effect on our ability to compete in the market. Third parties making claims against us could obtain injunctive or other equitable relief against us, which could prevent us from further developing or commercializing our product candidates.

In particular, we may be required to include a certification of patent invalidity or non-infringement, or a paragraph IV certification, in an NDA submitted under the 505(b)(2) regulatory pathway, to certify that a patent over a reference listed drug is invalid, unenforceable or will not be infringed by the manufacture, use or sale of our product candidate. The holder of such patent may file a patent infringement lawsuit against us after receiving notice of the paragraph IV certification. Any such patent infringement lawsuit, if filed, will trigger a one-time, automatic, 30-month stay of the FDA's ability to approve our application, unless the patent litigation is resolved in our favor or the patent expires before that time. Accordingly, we may invest a significant amount of time and expense in the development of a product candidate only to be subject to significant delay and incur substantial costs in litigation before such product candidate may be commercialized, if at all. Companies that produce reference listed drugs routinely bring claims for patent infringement against applicants under the 505(b)(2) regulatory pathway that are seeking regulatory approval to manufacture and market generic or reformulated forms of their reference listed drugs.

In the event of a successful infringement claim against us, including an infringement claim filed in response to a paragraph IV certification, we may be required to pay damages, cease the development or commercialization of our drug products or product candidates, re-engineer or redevelop our drug products or product candidates or enter into royalty or licensing agreements, any of which could have a material and adverse impact on our business, financial condition and results of operations. Any effort to re-engineer or redevelop our products would require additional monies and time to be expended and may not ultimately be successful.

Infringement claims may be brought against us in the future, and we cannot assure you that we will prevail in any ensuing litigation given the complex technical issues and inherent uncertainties involved in intellectual property litigation. Our competitors may have substantially greater resources than we do and may be able to sustain the costs of such litigation more effectively than we can.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. While various extensions may be available, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

We intend to seek extensions of patent terms in the United States and, if available, in other countries where we prosecute patents. In the United States, the U.S. Drug Price Competition and Patent Term Restoration Act of 1984, as amended, or the Hatch-Waxman Act, permits patent owners to request a patent term extension, based on regulatory review period for a product, of up to five years beyond the normal expiration of the patent, which is limited to one patent claiming the approved drug product or use in an indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the U.S. Patent and Trademark Office, or the USPTO, in the United States, and comparable regulatory authorities in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or grant more limited extensions than we had requested. In such event, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our preclinical and clinical data in their marketing approval applications with the FDA to launch their drug product earlier than might otherwise be the case.

If we fail to comply with various procedural, document submission, fee payment or other requirements imposed by the USPTO or comparable patent agencies in other countries, our patent protection could be reduced or eliminated.

We are required, over the lifetime of an issued patent, to pay periodic maintenance fees to the USPTO and comparable patent agencies in other countries. We are also required by such patent agencies to comply with a number of procedural, documentary, fee payment and other conditions during the patent application process. While an inadvertent lapse can, in many cases, be cured by payment of a late fee or other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of a patent or patent application, resulting in the partial or complete loss of patent rights in the relevant jurisdiction. Such situations include, but are not limited to:

- § a failure to respond to official actions within the prescribed time limits;
- § the non-payment of fees; and
- § a failure to properly legalize and submit formal documents.

If we or our licensors, which control the prosecution and maintenance of patents which we license, fail to maintain the patents or patent applications covering our product candidates or technology, such rights

would be reduced or eliminated and, consequently, our competitive position, business and prospects may be materially and adversely affected.

Changes in patent laws or interpretations of patent laws in the United States or elsewhere may diminish the value of our intellectual property or narrow the scope of protection of our patents.

In September 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law, and many of the substantive changes became effective in March 2013. The Leahy-Smith Act includes a number of significant changes to U.S. patent law, including changing the United States patent system from a "first to invent" system to a "first inventor to file" system, expanding the definition of prior art and developing a post-grant review system.

The provisions under the Leahy-Smith Act may affect the way patent applications will be prosecuted and may also affect patent litigation. It may also weaken our ability to obtain patent protection in the United States for those applications filed after March 16, 2013.

Further, the post-grant review and inter partes review proceedings established under the Leahy-Smith Act have been used by certain parties to cause a cancellation of selected or all claims in relation to the issued patents of their competitors. For a patent with an effective filing date of March 16, 2013 or later, a petition for post-grant review can be filed by a third party in a nine-month window from issuance of the patent. A petition for inter partes review can be filed after the nine-month period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas inter partes review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than that used in civil actions in the U.S. federal courts. Therefore, it is generally considered easier for a competitor or third party to have a U.S. patent invalidated in a USPTO post-grant review or inter partes review proceeding than invalidated in a litigation in a U.S. federal court. We cannot assure you that we, our licensors or our collaborators will be successful in defending any challenge by a third party in a USPTO proceeding.

In addition, recent court rulings in the United States have narrowed the scope of patent protection available and weakened the rights of patent owners, particularly in the pharmaceutical industry. In 2012, the Supreme Court of the United States, or the Supreme Court, issued a decision in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* invalidating patent claims directed to a process of measuring a metabolic product in a patient to optimize a drug dosage for the patient. In 2013, the Supreme Court issued its decision in *Association for Molecular Pathology v. Myriad Genetics, Inc.* invalidating patent claims directed to the breast cancer susceptibility genes BRCA1 and BRCA2. In 2017, the Supreme Court issued its decision in *TC Heartland v. Kraft Food Group Brands*, holding that patentees can only sue alleged infringers in their state of incorporation. These rulings deviated from precedents and, accordingly, have created uncertainty with regard to our ability to obtain patents in the future as well as the value of such patents, once obtained. Depending on future actions by Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would affect our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

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

Filing, prosecuting, enforcing and defending patents on our PRINT technology and our product candidates throughout the world may be prohibitively expensive and may not be financially or commercially feasible. In countries where we have not obtained patent protection, our competitors may be able to use our proprietary technologies to develop competing product candidates.

Also, the legal systems of non-U.S. jurisdictions may not protect intellectual property rights to the same extent or in the same manner as the laws of the United States, and we may face significant difficulty in enforcing our intellectual property rights in these jurisdictions. The legal systems of certain developing countries may not favor the enforcement of patents and other intellectual property rights. We may therefore face difficulty in stopping the infringement or misappropriation of our patents or other intellectual property rights in those countries.

We need to protect our trademark, trade name and service mark rights to prevent competitors from taking advantage of our goodwill.

We believe that the protection of our trademark, trade name and service mark rights, such as Liquidia, the Liquidia logo and PRINT, is an important factor in product recognition, protecting our brand, maintaining goodwill and maintaining or increasing market share. We may expend substantial cost and effort in an attempt to register new trademarks, trade names and service marks and maintain and enforce our trademark, trade name and service mark rights. If we do not adequately protect our rights in our trademarks, trade names and service marks from infringement, any goodwill that we have developed in those trademarks could be lost or impaired.

Third parties may claim that the sale or promotion of our products, when and if approved, may infringe on the trademark, trade name and service mark rights of others. Trademark, trade name and service mark infringement problems occur frequently in connection with the sale and marketing of pharmaceutical products. If we become involved in any dispute regarding our trademark, trade name and service mark rights, regardless of whether we prevail, we could be required to engage in costly, distracting and time-consuming litigation that could harm our business. If the trademarks, trade names and service marks we use are found to infringe upon the trademarks, trade names or service marks of another company, we could be liable for damages and be forced to stop using those trademarks, trade names or service marks, and as result, we could lose all the goodwill that has been developed in those trademarks, trade names or service marks.

Risks Related to Healthcare Regulation

We are subject to various laws and regulations, such as healthcare fraud and abuse laws, false claim laws and health information privacy and security laws, among others, and failure to comply with these laws and regulations may have an adverse effect on our business.

Healthcare providers, physicians and third-party payors often play a primary role in the recommendation and prescription of any drug products for which we may obtain marketing approval. Our current and future arrangements with healthcare providers, physicians, third-party payors and customers, and our sales, marketing and educational activities, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations (at the federal and state level) that may constrain our business or financial arrangements and relationships through which we market, sell and distribute our drug products for which we obtain marketing approval.

In addition, we may be subject to transparency laws and patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include, but are not limited to, the following:

- § the Anti-Kickback Statute, which prohibits, persons and entities including pharmaceutical manufacturers from, among other things, knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for or the purchase, lease, order or recommendation of an item or service for which payment may be made, in whole or in part, under federal healthcare programs such as the Medicare and Medicaid programs. This statute has been interpreted broadly to apply to, among other things, arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other

hand. The term "remuneration" expressly includes kickbacks, bribes or rebates and also has been broadly interpreted to include anything of value, including, for example, gifts, discounts, waivers of payment, ownership interest and providing anything at less than its fair market value. There are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, however, the exceptions and safe harbors are drawn narrowly, and practices that do not fit squarely within an exception or safe harbor may be subject to scrutiny. The failure to meet all of the requirements of a particular applicable statutory exception or safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices may not meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability in all cases. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation. In addition, 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. The U.S. Patient Protection and Affordable Health Care Act of 2010, as amended, or the ACA, amended the False Claims Act to provide that a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim;

- § the federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which prohibits individuals or entities from, among other things, knowingly presenting, or causing to be presented, claims for payment to, or approval by, the federal government that are false, fictitious or fraudulent or knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim to avoid, decrease or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the federal government. Although we do not submit claims directly to payors, manufacturers can be held liable under these laws if they are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers, promoting a product off-label, marketing products of sub-standard quality, or, as noted above, paying a kickback that results in a claim for items or services. In addition, our activities relating to the reporting of wholesaler or estimated retail prices for our products, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state and third-party reimbursement for our products, and the sale and marketing of our products, are subject to scrutiny under this law. For example, several pharmaceutical and other healthcare companies have faced enforcement actions under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. The False Claims Act also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the False Claims Act and to share in any monetary recovery. In addition, federal Anti-Kickback Statute violations and certain marketing practices, including off-label promotion, may also implicate the False Claims Act. Although the False Claims Act is a civil statute, conduct that results in a False Claims Act violation may also implicate various federal criminal statutes;
- § the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

Similar to the federal Anti-Kickback Statute, 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;

- § HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, including the Final Omnibus Rule published on January 25, 2013, impose, among other things, obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information held by certain healthcare providers, health plans and healthcare clearinghouses, known as covered entities, and business associates. Among other things, HITECH made certain aspects of HIPAA's rules (notably the Security Rule) directly applicable to business associates — independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also 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 court to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. The Department of Health and Human Services Office of Civil Rights, or the OCR, has increased its focus on compliance and continues to train state attorneys general for enforcement purposes. The OCR has recently increased both its efforts to audit HIPAA compliance and its level of enforcement, with one recent penalty exceeding \$5 million;
- § the federal physician payment transparency requirements, sometimes referred to as the "Physician Payments Sunshine Act," created under the ACA which requires applicable manufacturers of covered drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the State Children's Health Insurance Program (with certain exceptions) to annually report to the U.S. Department of Health and Human Services, information related to certain payments or other transfers of value made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- § according to the U.S. Federal Trade Commission, or the FTC, failing to take appropriate steps to keep consumers' personal information secure constitutes unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, or the FTCA. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Medical data is considered sensitive data that merits stronger safeguards. The FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule;
- § analogous state laws and regulations, such as state anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers, some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report pricing and marketing information, including, among other things, information related to payments to physicians and other healthcare providers or marketing expenditures, state and local laws that require the registration of pharmaceutical sales representatives, and state laws governing the privacy and security of health information and the use of prescriber-identifiable data in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts; and
- § price reporting laws that require us to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursements or discounts on our drug products. Participation in such programs and compliance with their requirements may subject us to increased infrastructure costs and potentially limit our ability to price our drug products.

Further, we are subject to a number of environmental and health and safety laws and regulations, including those governing laboratory processes and the handling, use, storage, treatment and disposal of hazardous materials and waste.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under such laws, it is possible that certain business activities could be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state 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. Ensuring that business arrangements with third parties comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert management's attention from the business.

If our operations are found to be in violation of any of the laws or regulations described above or any other laws or government regulations that apply to us, we may be subject to penalties, including, but not limited to, criminal, civil and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from participation in Medicare, Medicaid or other government healthcare programs, injunctions, private qui tam actions brought by individual whistleblowers in the name of the government and the curtailment or restructuring of our operations as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, any of which could adversely affect our ability to operate our business and our results of operations.

Legislative or regulatory reform of the healthcare system in our target markets may affect our operations and profitability.

In recent years, there have been numerous initiatives on the federal and state levels in the United States for comprehensive reforms affecting the payment for, the availability of and reimbursement for healthcare services. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States. For example, the ACA and the Health Care and Education Reconciliation Act of 2010, which amends the ACA, collectively, the U.S. Health Reform Laws, were signed into law in the United States in March 2010.

Among the provisions of the ACA of importance to the pharmaceutical industry are the following:

- § the Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition of Medicare Part B and Medicaid coverage of the manufacturer's outpatient drugs furnished to Medicaid patients. Effective in 2010, the ACA made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs from 15.1% of average manufacturer price, or AMP, to 23.1% of AMP, establishing new methodologies by which AMP is calculated and rebates owed by manufacturers under the Medicaid Drug Rebate Program are collected for drugs that are inhaled, infused, instilled, implanted or injected, adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, expanding the universe of Medicaid utilization subject to drug rebates to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations, and expanding the population potentially eligible for Medicaid drug benefits;

- § the expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals beginning in April 2010 and by adding new mandatory eligibility categories for certain individuals with income at or below 133.0% of the federal poverty level beginning in 2014, thereby potentially increasing both the volume of sales and manufacturers' Medicaid rebate liability;
- § in order for a pharmaceutical product to receive federal reimbursement under the Medicare Part B and Medicaid programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the AMP and Medicaid rebate amounts reported by the manufacturer. Effective in 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although, under the current state of the law, with the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs when used for the orphan indication. In addition, as 340B drug pricing is determined based on AMP and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase. Recent proposed guidance from the U.S. Department of Health and Human Services Health Resources and Services Administration, if adopted in its current form, may affect manufacturers' rights and liabilities in conducting audits and resolving disputes under the 340B program;
- § the ACA imposed a requirement on manufacturers of branded drugs to provide a 50% (and 70% commencing on January 1, 2019) discount off the negotiated price of branded drugs dispensed to Medicare Part D patients in the coverage gap (i.e., the donut hole);
- § the ACA imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications;
- § the ACA implemented the Physician Payments Sunshine Act;
- § the ACA requires annual reporting of drug samples that manufacturers and distributors provide to physicians;
- § the ACA expanded healthcare fraud and abuse laws in the United States, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers and enhanced penalties for non-compliance;
- § the ACA established a licensing framework for follow-on biologics;
- § a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research, along with the funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products by influencing decisions relating to coverage and reimbursement rates; and
- § the ACA established the Center for Medicare Innovation at the Centers for Medicare & Medicaid Center to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation from 2011 to 2019.

Some of the provisions of the ACA have yet to be implemented, and there have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017, or the TCJA, includes a provision repealing, effective January 1, 2019, the tax-based shared

responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole".

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2.0% per fiscal year, which went into effect in 2013, and due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. In January 2013, then-President Barack Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among others, delayed for another two months the budget cuts mandated by these sequestration provisions of the Budget Control Act of 2011. The ATRA also reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material and adverse effect on our customers and accordingly, our financial operations.

Further, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We are unable to predict the future course of federal or state healthcare legislation in the United States directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The U.S. Health Reform Laws and any further changes in the law or regulatory framework that reduce our revenue or increase our costs could also have a material and adverse effect on our business, financial condition and results of operations.

Healthcare laws and regulations may affect the pricing of our drug products and may affect our profitability.

In certain countries, the government may provide healthcare at a subsidized cost to consumers and regulate prices, patient eligibility or third-party payor reimbursement policies to control the cost of drug products. Such a system may lead to inconsistent pricing of our drug products from one country to another. The availability of our drug products at lower prices in certain countries may undermine our sales in other countries where our drug products are more expensive. In addition, certain countries may set prices by reference to the prices of our drug products in other countries. Our inability to secure adequate prices in a particular country may adversely affect our ability to obtain an acceptable price for our drug products in

existing and potential markets. If we are unable to obtain a price for our drug products that provides an appropriate return on our investment, our profitability may be materially and adversely affected.

Risks Related to this Offering and Our Common Stock

No active trading market for our common stock exists or may develop, and you may not be able to resell your common stock at or above the initial public offering price.

Prior to this offering, there has been no public market for our common stock and, although we have applied to have our common stock listed on The Nasdaq Global Market, an active trading market for our shares may never develop or be sustained following this offering. The initial price to public for our common stock will be determined through negotiations with the underwriters, and the negotiated price may not be indicative of the market price of the common stock after the offering. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable, may reduce the market value of your shares and may impair your ability to raise capital. 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.

Future sales of our common stock or securities convertible into our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock or securities convertible into our common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

Upon completion of this offering, _____ shares of our common stock will be outstanding (_____ shares of common stock will be outstanding assuming exercise in full of the underwriters' option to purchase additional shares). All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act, or Rule 144. The resale of the remaining _____ shares, or _____ % of our outstanding shares after the completion of this offering, is currently prohibited or otherwise restricted as a result of securities law provisions, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market stand-off and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act, or Rule 701. For more information see the section of this prospectus captioned "Shares Eligible for Future Sale."

Upon completion of this offering, the holders of approximately _____ shares, or _____ %, of our common stock, will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and shares to be issued under our equity incentive plans, they can be freely sold in the public market upon issuance or resale (as applicable), subject to the lock-up agreements described in the section of this prospectus captioned "Underwriting."

In the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

The incurrence of indebtedness could result in increased fixed payment obligations, and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights, limitations on declaring dividends and other operating restrictions that could adversely impact our ability to conduct our business. We could also be required to seek funds through collaborations, strategic alliances or licensing arrangements with third parties, and we could be required to do so at an earlier stage than otherwise would be desirable. In connection with any such collaborations, strategic alliances or licensing arrangements, we may be required to relinquish valuable rights to our intellectual property, future revenue streams, research programs or product candidates, grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves, or otherwise agree to terms unfavorable to us, any of which may have a material adverse effect on our business, operating results and prospects.

Our management has broad discretion in using the net proceeds from this offering and may not use them effectively.

We expect to use the net proceeds of this offering to complete our ongoing Phase 3 clinical trial of LIQ861, advance LIQ865 through our ongoing Phase 1 trial in the United States and our planned Phase 2-enabling toxicology studies, fund operations supporting the development of LIQ861 and LIQ865 and repay approximately \$2.3 million of outstanding indebtedness. Our management will have broad discretion in the application of the balance of the net proceeds and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our equity. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, diminish available cash flows available to service our debt, cause the value of our equity to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities, which may not yield favorable returns.

We expect that the market price of our common stock may be volatile, and you may lose all or part of your investment.

The trading prices of the securities of pharmaceutical and biotechnology companies have been highly volatile. The trading price of our common stock following this offering may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, these factors include:

- § the results of our or our competitors' clinical trials;
- § adverse results or delays in the planned clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- § any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- § regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our products and product candidates, including clinical trial requirements for approvals;
- § our inability to obtain or delays in obtaining adequate product supply for any approved product or inability to do so at acceptable prices;

- § failure to commercialize our product candidates or if the size and growth of the markets we intend to target fail to meet expectations;
- § additions or departures of key scientific or management personnel;
- § unanticipated serious safety concerns related to the use of our product candidates;
- § introductions or announcements of new products offered by us or significant acquisitions, strategic collaborations, joint ventures or capital commitments by us, our collaborators or our competitors and the timing of such introductions or announcements;
- § the introduction by our competitors of new products or technologies, or the success of our competitors' products or technologies;
- § our ability or inability to effectively manage our growth;
- § changes in the structure of healthcare payment systems;
- § our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- § publication of research reports about us or our industry, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- § market conditions in the pharmaceutical and biotechnology sectors or the economy generally;
- § our ability or inability to raise additional capital through the issuance of equity or debt or collaboration arrangements and the terms on which we raise it;
- § trading volume of our common stock;
- § disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- § period-to-period fluctuations in our quarterly results of operations or those of our competitors;
- § discrepancies between our actual operating results and the estimates or projections of investors or securities analysts;
- § fluctuations in the share price and trading volumes of other publicly traded companies engaged in similar business activities as us;
- § market conditions in the pharmaceutical industry and in general;
- § research and reports published by securities and industry analysts on our company or other companies engaged in similar business activities as us;
- § safety concerns in relation to the use of any of our product candidates or approved products; and/or
- § our involvement in significant lawsuits, including patent or stockholder litigation.

The stock market in general, and market prices for the securities of pharmaceutical companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. Stock prices of many pharmaceutical companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In several recent situations when the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

As a new investor, you will immediately experience substantial dilution as a result of this offering. Furthermore, future sales and issuances of equity securities, convertible securities or other securities could result in additional dilution of the percentage ownership of holders of our common stock.

The purchasers of shares of our common stock in this offering will experience immediate and substantial dilution of \$ _____ per share, based on the assumed initial public offering price of \$ _____ per share.

This dilution represents the amount by which the per share purchase price of our common stock offered in this offering exceeds the pro forma as adjusted net tangible book value per share of our common stock immediately following this offering. In addition, you may also experience additional dilution upon future equity issuances, including any other convertible debt or equity securities we may issue in the future, the exercise of stock options to purchase common stock granted to our employees, consultants and directors, including options to purchase common stock granted under our stock option and equity incentive plans, or the issuance of common stock in settlement of previously issued awards under our stock option and equity incentive plans that may vest in the future. See "Dilution."

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell equity securities, convertible securities or other securities in one or more transactions at prices and in a manner we determine from time to time. If we sell equity securities, convertible securities or other securities in more than one transaction, investors in this offering may be materially diluted by subsequent sales. Such sales would also likely result in material dilution to our existing equity holders, and new investors could gain rights, preferences and privileges senior to those of holders of our existing equity securities.

Our principal stockholders and management own a significant percentage of our stock and will be able to exercise significant influence over matters subject to stockholder approval.

Our executive officers, directors and principal stockholders, together with their respective affiliates, beneficially owned 61.2% of our capital stock as of March 2, 2018 and, upon completion of this offering, that same group will beneficially own % of our capital stock, of which % will be beneficially owned by our executive officers (assuming no exercise of the underwriters' option to purchase additional shares). Accordingly, after this offering, our executive officers, directors and principal stockholders will be able to determine the composition of the Board, retain the voting power to approve all matters requiring stockholder approval, including mergers and other business combinations, and continue to have significant influence over our operations. This concentration of ownership could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us that you may believe are in your best interests as one of our stockholders. This in turn could have a material adverse effect on our stock price and may prevent attempts by our stockholders to replace or remove the Board or management.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our common stock may be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have, and may never obtain research coverage by securities and industry analysts. If no or few analysts commence research coverage of us, or one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases research coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. Inferior internal controls could also cause investors to lose

confidence in our reported financial information, which could have a negative effect on the trading price of our common stock. In addition, any future testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement.

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as early as the fiscal year ending December 31, 2018. However, for as long as we are an "emerging growth company" under the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an emerging growth company for up to five years. An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

We will incur increased costs by being a public company.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We also anticipate that we will incur costs associated with relatively recently adopted corporate governance requirements, including requirements of the U.S. Securities and Exchange Commission and the Nasdaq Stock Market LLC, or Nasdaq. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect that these rules and regulations may 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 individuals to serve on our Board or as executive officers. We are currently evaluating and monitoring developments with respect to these rules, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

When we cease to be an "emerging growth company" and when our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 of the Sarbanes-Oxley Act will correspondingly increase. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

We are an "emerging growth company," as defined in the JOBS Act, and as a result of the reduced disclosure and governance requirements applicable to emerging growth companies, our common stock may be less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the 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 stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we rely 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 will take advantage of these reporting exemptions until we are no longer an "emerging growth company." We will remain an "emerging growth company" until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more, (ii) the last day of 2023, (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us difficult, limit attempts by our stockholders to replace or remove our current management and adversely affect our stock price.

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws to be effective upon consummation of this offering may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our stock. Among other things, the certificate of incorporation and bylaws will:

- § permit the Board to issue up to _____ shares of preferred stock, with any rights, preferences and privileges as they may designate;
- § provide that the authorized number of directors may be changed only by resolution of our Board;
- § provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- § require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be taken by written consent;
- § creating a staggered board of directors such that all members of our Board are not elected at one time;
- § allowing the authorized number of our directors to be changed only by resolution of our Board;
- § allowing for the issuance of authorized but unissued shares of our capital stock without any further vote or action by our stockholders; and
- § establishing advance notice requirements for nominations for election to the Board or for proposing matters that can be acted upon at stockholders' meetings.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any stockholder owning in excess of 15% of our outstanding stock for a period of three years following the date on which the stockholder obtained such 15% equity interest in us. See the section of this prospectus captioned "Description of Capital Stock — Anti-Takeover Effects of Provisions of our Certificate of Incorporation and Bylaws and Delaware Law" for additional information.

The terms of our authorized preferred stock selected by our Board at any point could decrease the amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and powers, including voting rights, of holders of our common stock without any further vote or action by the stockholders. As a result, the rights of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued by us in the future, which could have the effect of decreasing the market price of our common stock.

Any provision of our certificate of incorporation or bylaws or Delaware corporate law that has the effect of delaying or deterring a change in control could limit opportunities for our stockholders to receive a premium for their shares of common stock, and could also affect the price that investors are willing to pay for our common stock.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our equity securities. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of existing or any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our equity securities will likely be your sole source of gain for the foreseeable future.

Our ability to use our net operating loss carry forwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change", generally defined as a greater than 50.0% change (by value) in its equity ownership over a three year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income may be limited. With this offering as well as other past transactions and any ownership changes that we may experience in the future as a result of subsequent shifts in ownership of our shares of common stock, we may trigger an "ownership change" limitation. Should this occur, and if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

The recently passed Tax Cuts and Jobs Act, or the TCJA, could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law the TCJA which significantly reforms the Code. The TCJA, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses generated after December 31, 2017 to 80% of current year taxable income and elimination of net operating loss carrybacks, immediate deductions for certain new investments instead of deductions for depreciation expense over time and modifying or repealing many business deductions and credits. Federal net operating losses arising in taxable years ending after December 31, 2017 will be carried forward indefinitely pursuant to the TCJA. We continue to examine the impact this tax reform legislation may have on our business. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the TCJA is uncertain and our business and financial condition could be adversely affected. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. We urge our stockholders, including purchasers of common stock in this offering, to consult with their legal and tax advisors with respect to such legislation and the potential tax consequences of investing in our common stock.

Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our amended and restated certificate of incorporation provides that, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for: (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers to us or our stockholders; (iii) any action asserting a claim against us arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; or (d) any action asserting a claim against us governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have received notice of and consented to the foregoing provisions. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds more favorable for disputes with us or our directors or officers, which may discourage such lawsuits against us and our directors or officers. Alternatively, if a court were to find this choice of forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition, prospects or results of operations.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus may be forward-looking statements. The forward-looking statements are contained principally in the sections entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "should," "expects," "plans," "anticipates," "could," "would," "intends," "targets," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions. Forward-looking statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- § our plans to develop and commercialize our product candidates;
- § our planned clinical trials for our product candidates;
- § the timing of the availability of data from our clinical trials;
- § the timing of our planned regulatory filings;
- § the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- § the clinical utility of our product candidates and their potential advantages compared to other treatments;
- § our commercialization, marketing and distribution capabilities and strategy;
- § our ability to establish and maintain arrangements for the manufacture of our product candidates and the sufficiency of our current manufacturing facilities to produce commercial quantities of our product candidates;
- § our ability to establish and maintain collaborations;
- § our estimates regarding the market opportunities for our product candidates;
- § our intellectual property position and the duration of our patent rights;
- § our estimates regarding future expenses, capital requirements and needs for additional financing; and
- § our expected use of proceeds from this offering and the period over which such proceeds, together with cash, will be sufficient to meet our operating needs.

You should refer to the "Risk Factors" section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. The forward-looking statements in this prospectus are only predictions, and we may not actually achieve the plans, intentions or expectations included in our forward-looking statements. 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 business, financial condition and results of operations. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements.

These forward-looking statements speak only as of the date of this prospectus. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained in this prospectus after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

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 \$ _____ million, assuming an initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares, we estimate that the net proceeds from this offering will be \$ _____ million.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share would increase or decrease the net proceeds to us from this offering by \$ _____ million (or \$ _____ million if the underwriters exercise their option to purchase additional shares), assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares of common stock offered by us at the assumed initial public offering price of \$ _____ per share would increase or decrease the net proceeds to us from this offering by \$ _____ million, after deducting estimated underwriting discounts and commissions.

We currently estimate that we will use the net proceeds from this offering, together with our existing cash, as follows:

- § approximately \$ _____ to \$ _____ million to complete our ongoing Phase 3 clinical trial of LIQ861;
- § approximately \$ _____ to \$ _____ million to advance LIQ865 through our ongoing Phase 1 trial in the United States and our planned Phase 2-enabling toxicology studies;
- § approximately \$ _____ to \$ _____ million to fund operations supporting the development of LIQ861 and LIQ865;
- § approximately \$2.3 million to repay in full the outstanding promissory note issued to UNC, which has a maturity date of June 30, 2018 and bears interest at a rate equal to one-year LIBOR plus 3%, compounded annually; and
- § the remainder for working capital and general corporate purposes.

This expected use of the net proceeds from this offering and our existing cash represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development and commercialization efforts, the status of and results from clinical trials and actual results of operations, as well as any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

We may also use a portion of the remaining net proceeds to in-license, acquire or invest in complementary businesses, technologies, products or assets, although we have no current agreements, commitments or understandings to do so.

As of December 31, 2017, we had cash of \$3.4 million. In February 2018, we received aggregate gross proceeds of \$25.6 million from the issuance of shares of Series D preferred stock and a related rights offering. Based on our planned use of the net proceeds from this offering and our existing cash and current revenue forecasts, we estimate that such funds will be sufficient to enable us to support research and development needs and to fund our operating expenses and capital expenditure requirements until at least _____. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. We do not expect that the net proceeds

from this offering and our existing cash will be sufficient to enable us to fund the completion of development and commercialization of any of our product candidates.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities.

DIVIDEND POLICY

We currently expect to retain all future earnings, if any, for use in the operation and expansion of our business. We have never declared nor paid any dividends on our common stock and do not anticipate paying cash dividends to holders of our common stock in the foreseeable future. In addition, our loan agreement with our commercial lender prohibits our ability to pay dividends without the lender's prior written consent, with certain exceptions. See "Risk Factors — Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain."

CAPITALIZATION

The following table sets forth our cash and our capitalization as of December 31, 2017:

- § on an actual basis;
- § on a pro forma basis to give effect to:
 - § our issuance of 42,863,825 shares of Series D preferred stock in February 2018 and our receipt of \$25.6 million in aggregate proceeds therefrom and the related rights offering;
 - § our issuance of 48,283,657 shares of Series D preferred stock in February 2018 upon the conversion of outstanding convertible notes in the aggregate amount of \$28.9 million;
 - § the conversion of all of our outstanding shares of preferred stock, including the Series D preferred stock issued in February 2018, into an aggregate of _____ shares of our common stock, which will occur automatically upon the closing of this offering; and
 - § the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering; and
- § on a pro forma as adjusted basis to give further effect to our issuance and sale of _____ shares of our common stock in this offering at an assumed initial offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and our use of approximately \$2.3 million of the proceeds therefrom to repay debt as described in "Use of Proceeds."

You should read the information in this "Capitalization" section in conjunction with our financial statements and the related notes appearing at the end of this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Use of Proceeds" sections and other financial information contained in this prospectus.

	As of December 31, 2017		
	Actual	Pro forma	Pro forma
	(in thousands, except share and per share data)		
Cash	\$ 3,419	\$	\$
Long-term debt, including current portion	\$ 21,165	\$	\$
Capital leases, including current portion	980		
Stockholders' deficit:			
Convertible preferred stock, \$0.001 par value; 116,531,993 shares authorized, 42,964,956 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	43		
Common stock, \$0.001 par value; 175,330,664 shares authorized, 9,584,892 shares issued and outstanding, actual; shares authorized, shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	10		
Preferred stock, \$0.001 par value; no shares authorized, issued or outstanding, actual; shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—		
Additional paid-in capital	79,721		
Accumulated deficit	(113,413)		
Total stockholders' (deficit) equity	(33,692)		
Total capitalization	\$ (11,547)	\$	\$

Our cash and our capitalization following the completion of this offering will depend 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 estimated price range set forth on the cover of this prospectus, would increase or decrease the pro forma as adjusted amount of each of cash, additional paid-in capital, total stockholders' equity and total capitalization by \$ million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase or decrease of 1.0 million in the number of shares we are offering at the assumed initial public offering price of \$ per share would increase or decrease the pro forma as adjusted amount of each of cash, additional paid-in capital, total stockholders' equity and total capitalization by \$ million.

The table above does not include:

- § 11,245,985 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2017, with a weighted average exercise price of \$0.27 per share;
- § shares of common stock issuable upon the exercise of stock options granted after December 31, 2017, with a weighted average exercise price of \$ per share;
- § 2,146,767 shares of common stock issuable upon the vesting of restricted stock units granted after December 31, 2017 to Kevin Gordon, our President and Chief Financial Officer;

- § 4,699,565 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2017, with a weighted average exercise price of \$0.09 per share;
- § an aggregate of shares of common stock issuable upon the exercise of stock options to be granted to certain of our officers and directors on the date of execution of the underwriting agreement under the 2018 Plan, assuming we sell shares in this offering;
- § shares of common stock issuable upon the vesting of restricted stock units to be granted to Mr. Gordon on the date of execution of the underwriting agreement pursuant to his employment agreement, assuming we sell shares in this offering;
- § an additional 9,209,365 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. Stock Option Plan, as amended, or the 2004 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering;
- § an additional 1,087,617 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, or the 2016 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering; and
- § an additional shares of common stock that will be made available for future issuance under the 2018 Plan upon the effectiveness of the registration statement of which this prospectus forms a part.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately 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 this offering. Net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock then issued and outstanding.

Our net tangible book value as of December 31, 2017 was \$(33.7) million, or \$(3.56) per share of common stock.

On a pro forma basis, after giving effect to (i) our issuance of Series D preferred stock in February 2018 for aggregate gross proceeds of \$25.6 million and upon the conversion of outstanding convertible notes in the aggregate amount of \$28.9 million, and (ii) the conversion of all of our preferred stock outstanding, including the Series D preferred stock issued in February 2018, as of December 31, 2017 into an aggregate of _____ ordinary shares upon the closing of this offering, our pro forma net tangible book value as of December 31, 2017 would have been \$ _____ million, or \$ _____ per share of common stock.

After giving effect to the issuance and sale by us of _____ shares of common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, and our use of approximately \$2.3 million of the proceeds therefrom to repay debt as described in "Use of Proceeds," our pro forma as adjusted net tangible book value as of December 31, 2017 would have been \$ _____ million, or \$ _____ per share. 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 in pro forma as adjusted net tangible book value of \$ _____ per share to new investors purchasing common stock in this offering at the assumed initial public offering price. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share of common stock after this offering from the amount of cash that a new investor paid for a share of common stock.

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

Assumed initial public offering price per share	\$ _____
Historical net tangible book value per share as of December 31, 2017	\$ (3.56)
Increase in net tangible book value per share attributable to the pro forma adjustments described above	_____
Pro forma net tangible book value per share before giving effect to this offering	_____
Increase in pro forma net tangible book value per share attributable to this offering	_____
Pro forma as adjusted net tangible book value per share after this offering	_____
Dilution per share to new investors in this offering	\$ _____

The pro forma as adjusted information discussed above is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, would increase or decrease the pro forma as adjusted net tangible book value after this offering by \$ _____ million, the pro forma as adjusted net tangible book value per share by \$ _____, and dilution per share to new investors purchasing shares in

this offering by \$ _____, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions. We may also increase or decrease the number of shares we are offering. An increase of 1.0 million 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 after this offering by \$ _____ and decrease the dilution per share to new investors participating in this offering by \$ _____, assuming no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions. A decrease of 1.0 million 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 no change in the assumed initial public offering price and after deducting estimated underwriting discounts and commissions.

If the underwriters exercise their option in full to purchase additional shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be \$ _____, the increase in the pro forma net tangible book value per share to existing stockholders would be \$ _____ and the dilution per share to new investors purchasing shares in this offering would be \$ _____.

If any shares are issued upon exercise of outstanding options, or if additional options or other equity awards are granted and exercised or become vested, or if other issuances of common stock are made, you will experience further dilution.

The following table summarizes as of December 31, 2017, on the pro forma as adjusted basis described above, the number of our shares of common stock purchased from us and the total consideration and the average price per share paid to us by existing stockholders and by new investors purchasing our common stock in this offering at an assumed initial public offering price of \$ _____ per share, the midpoint of the estimated price range set forth on the cover of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders			%\$		%\$
New investors					
Total		100.0%	\$		%

A \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the estimated price range set forth on the cover of this prospectus, would increase or decrease the total consideration paid by new investors in this offering by \$ _____ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by _____ percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by _____ percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. An increase or decrease of 1.0 million in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease the total consideration paid by new investors by \$ _____ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by _____ percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by _____ percentage points.

consideration paid by new investors by _____ percentage points, assuming no change in the assumed initial public offering price per share.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters exercise their option to purchase additional shares of common stock in full, the number of shares of common stock held by existing stockholders would decrease to _____ % of the total number of shares of common stock outstanding after this offering, and the number of shares held by new investors would increase to _____ % of the total number of shares of common stock outstanding after this offering.

The number of shares purchased from us by existing stockholders is based on _____ shares of common stock outstanding as of December 31, 2017, after giving effect to the automatic conversion of all of our outstanding preferred shares into _____ shares of common stock upon the closing of this offering, and excludes:

- § 11,245,985 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2017, with a weighted average exercise price of \$0.27 per share;
- § _____ shares of common stock issuable upon the exercise of stock options granted after December 31, 2017, with a weighted average exercise price of \$ _____ per share;
- § 2,146,767 shares of common stock issuable upon the vesting of restricted stock units granted after December 31, 2017 to Kevin Gordon, our President and Chief Financial Officer;
- § 4,699,565 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2017, with a weighted average exercise price of \$0.09 per share;
- § an aggregate of _____ shares of common stock issuable upon the exercise of stock options to be granted to certain of our officers and directors on the date of execution of the underwriting agreement under the 2018 Plan, assuming we sell _____ shares in this offering;
- § _____ shares of common stock issuable upon the vesting of restricted stock units to be granted to Mr. Gordon on the date of execution of the underwriting agreement pursuant to his employment agreement, assuming we sell _____ shares in this offering;
- § an additional 9,209,365 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. Stock Option Plan, as amended, or the 2004 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering;
- § an additional 1,087,617 shares of common stock reserved for issuance under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, or the 2016 Plan, as of December 31, 2017, which shares will no longer be reserved following this offering; and
- § an additional _____ shares of common stock that will be made available for future issuance under the 2018 Plan upon the effectiveness of the registration statement of which this prospectus forms a part.

SELECTED FINANCIAL DATA

The selected statements of operations data for the years ended December 31, 2016 and 2017 and the balance sheet data as of December 31, 2016 and 2017 are derived from our audited financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected in any future period.

The following selected financial data should be read with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus. The selected financial data in this section are not intended to replace the financial statements and are qualified in their entirety by the financial statements and related notes included elsewhere in this prospectus.

	Year ended December 31,	
	2016	2017
Statement of operations data:		
Revenues	\$ 13,216,989	\$ 7,258,123
Costs and expenses:		
Cost of sales	918,778	319,759
Research and development	23,319,886	24,753,876
General and administrative	4,841,128	10,212,774
Total costs and expenses	29,079,792	35,286,409
Loss from operations	(15,862,803)	(28,028,286)
Other income (expense):		
Interest income	14,906	268
Interest expense	(85,865)	(13,010,475)
Derivative and warrant fair value adjustment	—	11,884,253
Total other income (expense), net	(70,959)	(1,125,954)
Net loss	(15,933,762)	(29,154,240)
Other comprehensive loss	—	—
Comprehensive loss	\$ (15,933,762)	\$ (29,154,240)
Net loss per share, basic and diluted	\$ (2.16)	\$ (3.08)
Weighted average shares outstanding, basic and diluted	7,361,596	9,475,083
Pro forma net loss per share, basic and diluted (unaudited)		\$
Pro forma weighted-average common shares outstanding, basic and diluted (unaudited)		\$

	As of December 31,	
	2016	2017
Balance Sheet Data:		
Cash	\$ 1,438,712	\$ 3,418,979
Total assets	8,486,533	14,843,602
Total debt	8,113,660	21,165,131
Capital stock and additional paid-in capital	66,068,868	79,721,075
Accumulated deficit	(84,259,071)	(113,413,311)
Total stockholders' deficit	(18,245,203)	(33,692,236)

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 our financial statements and related notes appearing in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in, or implied by, the forward-looking statements contained in the following discussion and analysis. See "Cautionary Note Regarding Forward-Looking Statements."

Overview

We are a late-stage clinical biopharmaceutical company focused on the development and commercialization of human therapeutics using our proprietary PRINT technology to transform the lives of patients. PRINT is a particle engineering platform that enables precise production of uniform drug particles designed to improve the safety, efficacy and performance of a wide range of therapies. We are currently focused on the development of two product candidates for which we hold worldwide commercial rights: LIQ861 for the treatment of pulmonary arterial hypertension, or PAH, and LIQ865 for the treatment of local post-operative pain. Our lead product candidate, LIQ861, is being evaluated in a Phase 3 clinical trial as a potential treatment for PAH. LIQ861 is an inhaled dry powder formulation of treprostinil that is administered using a convenient, disposable dry powder inhaler, or DPI. Treprostinil is a synthetic analog of prostacyclin, a vasoactive mediator essential to normal lung function, is deficient in patients with PAH. We believe that LIQ861 has the potential to improve the therapeutic profile of existing formulations of treprostinil by enhancing deep-lung delivery and achieving higher dose levels than current inhaled therapies. We have completed one, and are currently conducting a second, Phase 1 clinical trial of our second product candidate, LIQ865, for the treatment for local post-operative pain. LIQ865 is our proprietary injectable, sustained-release formulation of bupivacaine, a non-opioid pain medicine. We have designed LIQ865 to be administered as a single treatment for the management of local post-operative pain for three to five days after a procedure, which we believe, if approved, has the potential to provide significantly longer post-operative pain relief compared to currently marketed formulations of bupivacaine. We expect to initiate Phase 2-enabling toxicology studies in the second half of 2018.

In addition to developing our two current product candidates, we license our PRINT technology to leading pharmaceutical companies seeking to develop their own potential drug and biologic therapies. We believe that our PRINT technology can be applied to a wide range of therapeutic areas, molecule types and routes of administration. We are currently focused on developing product candidates that we believe are eligible to be approved under the 505(b)(2) regulatory pathway, which can be capital efficient and potentially enable a shorter time to approval, as it allows us to rely in part on existing knowledge of the safety and efficacy of the relevant reference listed drugs to support our applications for approval in the United States. If any of our product candidates are approved, we intend to manufacture them using in-house capabilities. Where appropriate, we will rely on third-party CMOs to produce, package and distribute our approved drug products on a commercial scale.

We have not generated any revenue to date from the sale of pharmaceutical products, and we have historically financed our operations in large part with an aggregate of \$116.6 million of gross proceeds from sales of our convertible preferred stock, convertible promissory notes, \$10.0 million in term loans from a bank and a \$2.1 million loan from UNC. We do not expect to generate significant product revenue unless and until we obtain marketing approval for and commercialize LIQ861, LIQ865 or one of our other future product candidates.

Since our inception, we have incurred significant operating losses. Our net loss was \$15.9 million and \$29.2 million for the years ended December 31, 2016 and 2017, respectively, and as of December 31, 2017, we had an accumulated deficit of \$113.4 million. We expect to incur significant expenses and operating losses for the foreseeable future as we advance our product candidates through clinical trials, and seek regulatory approval and pursue commercialization of any approved product candidate. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. In addition, we may incur expenses in connection with the in-license or acquisition of additional product candidates. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, investor relations and other expenses that we did not incur as a private company.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions.

As of December 31, 2017, we had cash of \$3.4 million. In February 2018, we received proceeds of \$25.6 million from the sale of our Series D preferred stock and related rights offering. We believe that the anticipated net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements until at least . We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. See " — Liquidity and Capital Resources."

Our Collaborations

Our only revenue, which has been derived from collaborating and licensing our proprietary PRINT technology to pharmaceutical companies, amounted to \$13.2 million and \$7.3 million for the years ended December 31, 2016 and 2017, respectively. GSK accounted for \$11.8 million and \$6.1 million, for the years ended December 31, 2016 and 2017, respectively, or 90% and 84%, respectively, of our total revenue. Our collaborators make up-front fees or technology access payments, pay us to achieve clinical milestones, pay us fees to develop their drug products through research and development services like particle formulation and manufacturing and will pay us royalties upon ultimate commercial sales of the related products.

GSK

We have actively collaborated with GSK on the use of our PRINT technology in respiratory disease since 2012.

In June 2012, we entered into a Vaccines Collaboration and Option Agreement with GSK, or the GSK VCO Agreement, to collaborate on research regarding the application of our PRINT technology to specified inhaled therapies. In March 2015, GSK made a one-time payment of \$5.0 million to extend the agreement for 13 months through April 30, 2016, and such payment was amortized into revenue over that extension period. We and GSK mutually agreed to terminate this agreement in April 2016, and we will not recognize any further revenues under this agreement. Revenues from research and development services under the GSK VCO Agreement amounted to \$1.3 million and \$0 for the years ended December 31, 2016 and 2017, respectively.

In June 2012, we also entered into an Inhaled Collaboration and Option Agreement with GSK, or the GSK ICO Agreement, under which we granted GSK exclusive options and licenses to further develop and commercialize inhaled therapies using our PRINT technology. In September 2015, GSK exercised its option

to obtain an exclusive, worldwide license to certain of our know-how and patents relating to our PRINT technology, for the purpose of, among others, conducting preclinical studies of inhaled therapeutics developed, manufactured or otherwise produced using our PRINT technology. In consideration for GSK's exercise of this option, we received a non-refundable up-front payment of \$15.0 million, which amount is being amortized into revenue over a period of five years from September 2015 based on the estimated development period. Under the terms of the GSK ICO Agreement, we are also entitled to certain milestone payments aggregating up to \$158 million upon the achievement of specified milestone events, and tiered royalties on the worldwide sales of the licensed products at percentages in the mid-single digits. In February 2016, we received a \$3.0 million payment from GSK upon the achievement of a clinical development milestone. We recognized the full amount of this payment as revenue in the year ended December 31, 2016. Revenues from research and development services under the GSK ICO Agreement amounted to \$2.9 million and \$3.1 million for the years ended December 31, 2016 and 2017, respectively.

In December 2017, GSK informed us of its modified plans under the GSK ICO Agreement that reduced its requirements and budget for our research and development support in 2018. As a result, we expect revenues from research and development services under the GSK ICO Agreement to be less than \$250,000 during 2018. In response, in January 2018, we reduced our research and development workforce accordingly, and we anticipate that we will incur approximately \$400,000 in expense relating to the workforce reduction.

We also entered into other engagements with GSK under the GSK ICO Agreement, primarily for platform research services. As of March 9, 2018, GSK is conducting a Phase 1 clinical trial of an inhaled COPD product candidate that is formulated as an inhaled dry powder using the PRINT technology.

G&W Laboratories

In June 2016, we entered into a development and license agreement with G&W Labs, or the G&W Labs Agreement, to develop multiple products for topical delivery in dermatology using our PRINT technology. We received the first non-refundable up-front fee of \$1.0 million under this agreement in June 2016, which amount is being amortized into revenue over a period of five years, which we expect to correspond with the collaboration term. We began performing research and development services under this agreement in July 2016, and such work is not completed as of the date of this prospectus.

Gates Foundation

In 2011, we entered into a collaboration agreement with the Bill & Melinda Gates Foundation, primarily for research services related to developing vaccines targeted at developing markets. We received an up-front fee of \$1.0 million under this agreement, which we recognized as revenue through December 2017. As of the date of this prospectus, we are not performing any services under this collaboration agreement and do not expect to recognize any further revenue under the agreement.

Components of Statements of Operations

Revenue

Our revenue is primarily derived from collaborating and licensing our proprietary PRINT technology to pharmaceutical companies. In the future, we also expect to derive our revenue from our own pharmaceutical products. We report financial information in the following two business segments:

Pharmaceutical Products. We utilize our proprietary PRINT technology to develop novel product candidates, such as LIQ861 and LIQ865. We have not commenced the commercialization of any pharmaceutical products and have not recognized any product revenues to date for this business segment. We intend to commercialize LIQ861 independently in the United States and to evaluate our commercialization and development plans for LIQ865. Outside of the United States, we intend to pursue the regulatory approval and commercialization of LIQ861 and LIQ865 with leading pharmaceutical companies with regional expertise. Revenues from these licensing arrangements

would be recognized in this segment. In addition, if LIQ861 or LIQ865 is approved for marketing, we expect to recognize any revenues from sales of that product in this segment.

Partnering and Licensing. We also utilize our proprietary PRINT technology to enable the development of product candidates by other pharmaceutical companies. We perform research and development services for third parties in the areas of particle formulation and manufacturing and charge market billing rates. We typically receive up-front fees or technology access payments, as well as milestone payments for each phase of clinical achievement. If any of these drug products achieve commercialization, we also expect to be eligible to receive royalties from sales of those drug products. For the years ended December 31, 2016 and 2017, all of our revenue from our license and collaboration agreements described above was part of our Partnering and Licensing segment.

For the years ended December 31, 2016 and 2017, the majority of our revenue from collaborating and licensing our proprietary PRINT technology to pharmaceutical companies was derived under two separate agreements with GSK, which we refer to as the GSK VCO Agreement and the GSK ICO Agreement. These two arrangements with GSK accounted for \$11.8 million and \$6.1 million in revenue for the years ended December 31, 2016 and 2017, respectively, representing 90% and 84% of our total revenue for the years ended December 31, 2016 and 2017, respectively. This revenue comprised billings for research and development services, milestone payments and amortization of deferred revenue from up-front payments.

Cost of Sales

Cost of sales consists of the amortization of license fees owed to UNC upon our receipt of licensing revenues. See "Business — Our Collaboration and Licensing Agreements — The University of North Carolina at Chapel Hill" for further details. The amortization period is the same as the period over which the related revenue is recognized.

Research and Development Expenses

Research and development expense consists of expenses incurred in connection with the development of our product candidates. We expense research and development costs as incurred. These expenses include:

- § expenses incurred under agreements with CROs, as well as investigative sites and consultants that conduct our clinical trials and preclinical studies;
- § manufacturing scale-up expenses and the cost of acquiring and manufacturing preclinical and clinical trial materials and commercial materials, including manufacturing validation batches;
- § outsourced professional scientific development services;
- § employee-related expenses, which include salaries, benefits and stock-based compensation for personnel in research and development functions;
- § expenses relating to regulatory activities, including filing fees paid to regulatory agencies;
- § laboratory materials and supplies used to support our research activities; and
- § allocated expenses for utilities and other facility-related costs.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase significantly over the next several years as we increase personnel costs, including stock-based compensation, conduct our ongoing Phase 3 clinical trial of LIQ861, continue the development of LIQ865 and conduct other clinical trials and prepare regulatory filings for our product candidates.

The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of, or when, if ever, material net cash inflows may commence from any of our product candidates. This uncertainty is due to the numerous risks and uncertainties associated with the

duration and cost of clinical trials, which vary significantly over the life of a project as a result of many factors, including:

- § the number of clinical sites included in the trials;
- § the length of time required to enroll suitable patients;
- § the number of patients that ultimately participate in the trials;
- § the number of doses patients receive;
- § the duration of patient follow-up; and
- § the results of our clinical trials.

Our expenditures are subject to additional uncertainties, including the terms and timing of regulatory approvals, and the expense of filing, prosecuting, defending and enforcing any patent claims or other intellectual property rights. We may never succeed in achieving regulatory approval for any of our product candidates. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some product candidates or focus on others. A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or other regulatory authorities were to require us to conduct clinical trials beyond those that we currently anticipate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development. Drug commercialization will take several years and millions of dollars in development costs.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive, administrative, finance and legal functions, including stock-based compensation, travel expenses and recruiting expenses. Other general and administrative expenses include facility related costs, patent filing and prosecution costs and professional fees for marketing, legal, auditing and tax services and insurance costs.

We anticipate that our general and administrative expenses will increase as a result of increased personnel costs, including stock-based compensation, expanded infrastructure and higher consulting, legal and tax-related services associated with maintaining compliance with stock exchange listing and SEC requirements, accounting and investor relations costs, and director and officer insurance premiums associated with being a public company. We anticipate the additional costs for these services will increase our general and administrative expenses by approximately \$1.5 million to \$2.0 million on an annual basis. Additionally, if and when we believe a regulatory approval of a product candidate appears likely, we anticipate an increase in payroll and expense as a result of our preparation for commercial operations, especially as it relates to the sales and marketing of our product candidate.

Results of Operations**Years ended December 31, 2016 and 2017**

The following table summarizes our results of operations:

	Year ended December 31,	
	2016	2017
	(in thousands)	
Revenues	\$ 13,217	\$ 7,258
Costs and expenses:		
Cost of sales	919	320
Research and development	23,320	24,754
General and administrative	4,841	10,212
Total costs and expenses	29,080	35,286
Loss from operations	(15,863)	(28,028)
Other income (expense):		
Interest income	15	—
Interest expense	(86)	(13,010)
Derivative and warrant fair value adjustments	—	11,884
Total other income (expense)	(71)	(1,126)
Net loss	\$ (15,934)	\$ (29,154)

Revenues

Revenues were \$7.3 million for the year ended December 31, 2017, compared to \$13.2 million for the year ended December 31, 2016. The decrease of \$6.0 million, or 45%, was due to a decrease of \$3.0 million in non-refundable milestone payments recognized as revenue in 2016 from the GSK ICO Agreement and a decrease of \$2.9 million related to revenue recognized in 2016 from the GSK VCO Agreement which was terminated in April 2016. Our revenues of \$7.3 million in the year ended December 31, 2017 consisted primarily of \$6.1 million attributable to the GSK ICO Agreement. Under the GSK ICO Agreement, we received an up-front payment of \$15.0 million in 2015. We are amortizing this payment into revenue over a five-year period, resulting in revenues of \$3.0 million during the year ended December 31, 2017. In addition, we performed research and development services under this agreement and recognized revenues of \$3.1 million for such services during the year ended December 31, 2017. In addition to GSK, in June 2016, we entered into the G&W Labs Agreement under which we received an up-front payment of \$1.0 million. We are amortizing this payment into revenue over a five-year period, resulting in revenue of \$0.2 million during the year ended December 31, 2017. In addition, we performed research and development services under this agreement and recognized revenues of \$0.2 million and \$0 for such services during the years ended December 31, 2016 and 2017, respectively. In addition, in February 2011, we entered into a collaboration agreement with the Bill & Melinda Gates Foundation, primarily for research services related to developing vaccines targeted at developing markets under which we received an up-front payment of \$1.0 million. We are amortizing this payment into revenue over a 6.75 year period, resulting in revenue of \$0.2 million and \$0.2 million during the years ended December 31, 2016 and 2017, respectively. In addition, we performed research and development services under various collaboration agreements with other companies and recognized revenue of \$0.9 million and \$0.8 million for such services during the years ended December 31, 2016 and 2017, respectively.

Cost of Sales

Our cost of sales was \$0.3 million for the year ended December 31, 2017, compared to \$0.9 million for the year ended December 31, 2016. The decrease of \$0.6 million, or 65%, was due to a \$0.3 million license fee paid to UNC in 2016 related to the \$3.0 million non-refundable milestone payment from the GSK ICO Agreement, and a \$0.3 million license fee amortization in 2016 related to the GSK VCO Agreement, neither of which recurred in 2017. Cost of sales represents sub-licensing fees paid to UNC resulting from our recognition of licensing revenue from intellectual property that we in-licensed from UNC. This amount was attributable to our Partnering and Licensing segment.

Research and Development Expenses

Our research and development expenses were \$24.8 million for the year ended December 31, 2017, compared to \$23.3 million for the year ended December 31, 2016. The increase of \$1.5 million, or 6%, was due to the completion of a Phase 1 study and preparation of a Phase 3 study of LIQ861, in addition to the completion of one Phase 1 study and ongoing work on a second Phase 1 study for LIQ865. Research and development expenses consisted of \$5.0 million from the Partnering and Licensing segment, \$13.6 million from the Pharmaceutical Products segment, of which \$8.4 million and \$5.2 million were attributable to our ongoing development of LIQ861 and LIQ865, respectively, and \$6.2 million from general research and development that was not directly related to a particular segment.

General and Administrative Expenses

Our general and administrative expenses were \$10.2 million for the year ended December 31, 2017, compared to \$4.8 million for the year ended December 31, 2016. The increase of \$5.4 million, or 111%, was due to transaction costs related to our deferred potential initial public offering on a foreign exchange contemplated during 2017, and increases in staff and consultants. General and administrative expense are mainly the result of personnel expenses, including stock-based compensation, as well as legal and consulting fees and tax expense.

Loss from Operations

We recorded a loss from operations of \$28.0 million in the year ended December 31, 2017, compared to \$15.9 million for the year ended December 31, 2016. The increase of \$12.1 million, or 77%, was primarily due to a decrease in revenues and an increase in general and administrative expenses during the year ended December 31, 2017.

Other Income (Expense)

Interest income was less than \$1,000 for the year ended December 31, 2017 compared to \$14,900 for the year ended December 31, 2016. The decrease of \$14,600 was due to lower average balances in interest-bearing accounts during the year ended December 31, 2017.

Interest expense was \$13.0 million for the year ended December 31, 2017, compared to \$0.1 million for the year ended December 31, 2016. During 2017, we had higher levels of debt including convertible notes of \$27.4 million, bank borrowings of \$9.1 million, an amount owed to UNC of \$2.3 million, and existing capital lease obligations of \$0.9 million. The increase in interest expense of \$12.9 million was primarily due to amortization of discount on convertible notes of \$9.8 million, the expensing of debt issuance costs to interest expense of \$1.4 million and the recognition of accrued interest on the convertible notes, bank borrowings and capital lease obligations of \$1.8 million.

Derivative and warrant fair value adjustments were \$11.9 million for the year ended December 31, 2017, compared to \$0 for the year ended December 31, 2016. This increase was due to changes in the fair value of derivatives and warrants of \$9.9 million and \$2.0 million, respectively, for the year ended December 31, 2017. Derivatives and warrants were issued in conjunction with convertible note financings during the year ended December 31, 2017.

Liquidity and Capital Resources

Overview

We have financed our growth and operations through a combination of funds generated from our licensing revenues, the issuance of convertible preferred stock and common stock, capital leases, bank borrowings and the issuance of convertible notes. Our principal uses of cash have been for working capital requirements and capital expenditures. We monitor our net operating cash flow and maintain a level of cash deemed adequate by our management for working capital purposes.

As of December 31, 2017, we had a stockholders' deficit of \$33.7 million and negative working capital (defined as current assets less current liabilities) of \$25.0 million. Our cash balance was \$3.4 million as of December 31, 2017.

Sources of Liquidity

We have financed a portion of our working capital through debt instruments. We maintain a \$10.0 million term loan facility with PWB for working capital purposes. As of March 9, 2018, we have fully utilized our facility with PWB. The facility is secured by all of our assets other than intellectual property. We may not encumber our intellectual property without the consent of PWB. The outstanding principal amount under the loan facility bears interest at 5.0% per annum. Of the current amount outstanding, the loan matures with respect to \$3.0 million in January 2020, with the remainder being due and payable in October 2020. Our credit facility with PWB contains restrictions that limit our flexibility in operating our business. We may not, among other things, without the prior written consent of PWB, (a) pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock except in certain prescribed circumstances, (b) create, incur, assume, guarantee or be or remain liable with respect to any indebtedness except certain permitted indebtedness or prepay any indebtedness, (c) replace or suffer the departure of our Chief Executive Officer or Chief Financial Officer without delivering written notification to PWB within 10 days of such change or (d) suffer a change on our Board which results in the failure of at least one partner of either NEA or Canaan or their respective affiliates to serve as a voting member. We have, in the past, breached multiple covenants in our loan and security agreement related to cash levels and reporting requirements. PWB has provided waivers in relation to all such prior breaches.

During the year ended December 31, 2017, we had outstanding a promissory note to UNC. As of December 31, 2016 and 2017, the outstanding balance of this note payable was \$2.2 million and \$2.3 million, respectively. The note is unsecured and bears interest at a rate equal to one-year LIBOR plus 3%, compounded annually. The UNC Note is due and payable in full on June 30, 2018.

In a series of closings from January 9, 2017 to November 29, 2017, we issued and sold an aggregate of \$27.4 million underlying a total of 27 unsecured subordinated convertible promissory notes, each accruing simple interest at a rate of 8.0% per annum.

In February 2018, we issued and sold an aggregate of 91,147,482 shares of Series D preferred stock at a price per share equal to \$0.59808. Of the 31 investors that participated in this offering, 10 investors purchased an aggregate of 42,863,825 shares of Series D preferred stock for an aggregate purchase price of \$25.6 million and 26 holders of outstanding convertible notes in the aggregate amount of \$28.9 million converted their notes into an aggregate of 48,283,657 shares of Series D preferred stock.

The total amount of outstanding principal and accrued interest on our unsecured subordinated convertible promissory notes was \$28.6 million as of December 31, 2017. On February 2, 2018, the outstanding principal and accrued interest underlying each of the notes converted into shares of Series D preferred stock. Upon the closing of this offering, the shares of outstanding preferred stock will convert automatically into shares of common stock.

Cash Flows

The following table summarizes our sources and uses of cash for the periods indicated:

	Year ended December 31,	
	2016	2017
	(in thousands)	
Net cash provided by (used in):		
Operating activities	\$ (13,947)	\$ (24,290)
Investing activities	(2,885)	(2,544)
Financing activities	6,110	28,814
Net (decrease) increase in cash	\$ (10,722)	\$ 1,980

Operating Activities

Net cash used in operating activities increased \$10.3 million, from \$13.9 million for the year ended December 31, 2016 to \$24.3 million for the year ended December 31, 2017. The increase was mainly due to the increase in net loss. The primary drivers of operating cash requirements were our research and development and general and administrative activities in each period. For the year ended December 31, 2017, net cash used in operating activities was \$24.3 million, which comprised mainly operating cash outflows before working capital changes of \$24.7 million, and net working capital inflows of \$0.4 million.

Investing Activities

Net cash used in investing activities decreased \$0.4 million, from \$2.9 million for the year ended December 31, 2016 to \$2.5 million for the year ended December 31, 2017. The decrease was due to decreased purchases of property, plant and equipment.

Financing activities

Net cash provided by financing activities increased \$22.7 million, from \$6.1 million for the year ended December 31, 2016 to \$28.8 million for the year ended December 31, 2017. For the year ended December 31, 2017, net cash provided by financing activities of \$28.8 million was primarily due to proceeds from long-term debt of \$31.4 million comprised of \$4.0 million related to debt with PWB and convertible notes of \$27.4 million, which was offset by \$1.4 million in debt issuance costs. In addition, we received proceeds from the exercise of stock options and warrants of \$0.1 million. The aggregate proceeds from financing activities were partially offset by principal payments on debt of \$1.3 million.

Funding Requirements

We plan to focus in the near term on the development, regulatory approval and potential commercialization of LIQ861 and LIQ865. We anticipate we will incur net losses for the next several years as we complete clinical development of these product candidates and continue research and development of additional product candidates. In addition, we plan to continue to invest in discovery efforts to explore additional product candidates, potentially build commercial capabilities and expand our corporate infrastructure. We may not be able to complete the development and initiate commercialization of these programs if, among other things, our clinical trials are not successful or if the FDA does not approve our product candidates arising out of our current clinical trials when we expect, or at all.

Our primary uses of capital are, and we expect will continue to be, compensation and related expenses, clinical costs, external research and development services, laboratory and related supplies, legal and other regulatory expenses and administrative and overhead costs. Our future funding requirements will be heavily determined by the resources needed to support development of our product candidates.

Following this offering, we will be a publicly traded company and will incur significant legal, accounting and other expenses that we were not required to incur as a private company. In addition, the Sarbanes-Oxley Act, as well as rules adopted by the SEC and Nasdaq, requires public companies to implement specified corporate governance practices that are currently inapplicable to us as a private company. We expect these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

We believe that the anticipated net proceeds from this offering, together with our existing cash, will enable us to fund our operating expenses and capital expenditure requirements until at least _____, including the completion of our ongoing Phase 3 clinical trial for LIQ861 and the initiation of our Phase 2-enabling toxicology studies in 2018 for LIQ865. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We expect that we will require additional capital to commercialize our product candidates, if we receive regulatory approval, and to pursue in-licenses or acquisitions of other product candidates. If we receive regulatory approval for LIQ861 or LIQ865, we expect to incur significant commercialization expenses related to product manufacturing, sales, marketing and distribution, depending on where we choose to commercialize. Additional funds may not be available on a timely basis, on favorable terms, or at all, and such funds, if raised, may not be sufficient to enable us to continue to implement our long-term business strategy. If we are unable to raise sufficient additional capital, we may need to substantially curtail our planned operations and the pursuit of our growth strategy.

We may raise additional capital through the sale of equity or convertible debt securities. In such an event, your ownership will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our common stock.

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

- § the number and characteristics of the product candidates we pursue;
- § the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical studies and clinical trials;
- § the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- § the cost of manufacturing our product candidates and any product we successfully commercialize;
- § our ability to establish and maintain strategic collaborations, licensing or other arrangements and the financial terms of such agreements;
- § the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation; and
- § the timing, receipt and amount of sales of, or milestone payments related to or royalties on, our current or future product candidates, if any.

See "Risk Factors" for additional risks associated with our substantial capital requirements.

Critical Accounting Policies and Significant Judgments and Estimates

This management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to long-lived assets, derivatives, stock-based compensation and accrued expenses. We base our estimates on historical experience, known trends and events and various other factors that we believe to be 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 differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in the notes to our consolidated financial statements appearing elsewhere in this prospectus, we believe the following accounting policies to be the most critical to the judgments and estimates used in the preparation of our financial statements.

Going Concern

Our operations have consisted primarily of developing our technology, developing products, prosecuting our intellectual property and securing financing. We have incurred recurring losses and cash flows from operations, have an accumulated deficit and have debt maturing within twelve months. The accompanying financial statements have been prepared on a basis which assumes that we will continue as a going concern. We have incurred losses and cash outflows from operations since our inception. We expect to continue to incur losses in the foreseeable future and will require additional financial resources to continue to advance our products and intellectual property, in addition to repaying our maturing debt obligations. These circumstances raise substantial doubt about our ability to continue as a going concern. Management's plans with regard to this matter include continuing attempts to obtain additional financing from our current investors and new investors to sustain our operations or to pursue other financing alternatives. However, there is no assurance that we will be successful in obtaining sufficient financing on terms acceptable to us and our failure to obtain sufficient funds on acceptable terms, when needed, could have a material adverse effect on our business, results of operations and financial condition. If sufficient financings do not occur, this may necessitate other actions by us. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Revenue Recognition

Our revenues are generated through license, collaboration and other similar research and development agreements. These agreements include up-front fees, payments for achievement of specified development, regulatory and sales milestones and provision for billing for research and development services like particle formulations and manufacturing, all of which comprise our revenues. In addition, such agreements provide for royalties on product sales after commercial launch of the related products. We record any amounts received in advance of services performed as deferred revenue and recognize them as revenue over the estimated period of our substantive performance obligations.

We follow the revenue-recognition guidance established by Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 605, Revenue Recognition, or ASC 605. In determining the accounting for collaboration agreements, we follow the related guidance. Guidance is provided on whether an arrangement that involves multiple revenue-generating activities or deliverables should be divided into separate units of accounting for revenue-recognition purposes and, if division is required, how the arrangement consideration should be allocated among the separate units of accounting. If the arrangement constitutes separate units of accounting according to the separation criteria of the guidance, a revenue-recognition policy must be determined for each unit. If the arrangement constitutes a single unit of accounting, the revenue-recognition policy must be determined for the entire arrangement.

Collaboration research and development revenue is recognized when research is performed and related expenses are incurred. Non-refundable up-front fees, which may include, for example, an initial payment upon effectiveness of the contractual relationship or a payment to secure a right for a future license, are recorded as deferred revenue and recognized into revenue on a straight-line basis over the estimated period of our substantive performance obligations. If we do not have substantive performance obligations, we recognize non-refundable up-front fees into revenue over the estimated development period.

Revenue for non-refundable payments based on the achievement of milestone events under collaboration agreements are recognized in accordance with ASC 605-28-50-2(e). Milestone events under our collaboration agreements may include research, development, regulatory or commercialization events. A milestone payment is recognized as revenue when the applicable event is achieved, if the event meets the

definition of a milestone and the milestone is determined to be substantive. A milestone event is an event having all of the following characteristics: (1) there is substantive uncertainty regarding achievement of the milestone event at the inception of the arrangement; (2) the event can only be achieved based, in whole or in part, on either our performance or a specific outcome resulting from our performance; and (3) if achieved, the event would result in an additional payment due to us. We also treat events that can only be achieved based, in whole or in part, on either a third party's performance or a specific outcome resulting from a third party's performance, as milestone events if the criteria of the guidance are otherwise satisfied.

A milestone is considered substantive if it meets all of the following criteria: (1) the payment is commensurate with either our performance to achieve the milestone or with the enhancement of the value of the delivered item; (2) the payment relates solely to past performance; and (3) the payment is reasonable relative to all of the deliverables and payment terms within the arrangement. If any of these conditions is not met, the milestone payment is deferred and recognized on a straight-line basis over a period determined as discussed above.

Grant payments are recognized as grant revenue when we perform the work and incur reimbursable costs in accordance with the objectives of the award.

In May 2014, the FASB issued Accounting Standards Update, or ASU, 2014-09, *Revenue from Contracts with Customers*, or ASU 2014-09. The FASB issued ASU 2014-09 to clarify the principles for recognizing revenue and to develop a common revenue standard for GAAP. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes the most current revenue recognition guidance. This guidance was originally effective for annual periods and interim periods within those annual periods beginning after December 15, 2016 and early adoption was not permitted. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606) — Deferral of the Effective Date*, or ASU 2015-14, which deferred the effective date of the guidance in ASU 2014-09 by one year to December 15, 2017 for interim and annual reporting periods beginning after that date and permitted early adoption of the standard, but not before the original effective date of December 15, 2016. This standard will be effective for us for the year ending December 31, 2018. In 2016, the FASB clarified the implementation guidance on principal versus agent, identifying performance obligations, licensing, narrow-scope improvements, practical expedients, and to expedite improvements to 2014-09 by issuing ASU 2016-08, *Revenue from Contracts with Customers (Topic 606) — Principal versus Agent Considerations*, or ASU 2016-08, ASU 2016-10, *Revenue from Contracts with Customers (Topic 606) — Identifying Performance Obligations and Licensing*, or ASU 2016-10, ASU 2016-12, *Revenue from Contracts with Customers (Topic 606) — Narrow-Scope Improvements and Practical Expedients*, or ASU 2016-12, and ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, or ASU 2016-20. We will adopt this standard as of January 1, 2018 and will apply the modified retrospective method. Under this adoption method, we will record a cumulative adjustment to retained earnings at January 1, 2018 and apply the provisions of the ASU prospectively. We believe this ASU will have an impact on, but not limited to, how we identify performance obligations for our collaborative agreements and account for non-refundable milestones and up-front payments. This ASU will also require new comprehensive disclosures about contracts with customers, including the significant judgments we have made when applying the ASU. We have engaged a third party specialist to assist in determining the impact and application of the ASU and management is in the process of assessing the results. We will finalize our accounting assessment and quantitative impact of the adoption during the first quarter of fiscal year 2018, as required.

Stock-Based Compensation

We account for stock-based compensation under ASC Topic 718, *Compensation — Stock Compensation*, or ASC 718. Determining the amount of stock-based compensation to be recorded requires us to determine estimates of fair values of stock options as of the grant date.

We account for stock-based compensation by measuring and recognizing compensation expense for all stock-based payments made to employees and directors based on estimated grant date fair values. We use

the straight-line method to allocate compensation cost to reporting periods over each optionee's requisite service period, which is generally the vesting period. We estimate the fair value of our stock-based awards to employees and directors using the Black-Scholes option-pricing model, or the Black-Scholes Model. The Black-Scholes Model requires the input of subjective assumptions, including the expected stock price volatility, the calculation of expected term and the fair value of the underlying common stock on the date of grant, among other inputs. The risk-free interest rate was determined with the implied yield currently available for zero-coupon U.S. government issues with a remaining term approximating the expected life of the options.

All stock-based awards granted to non-employees are accounted for at their fair value in accordance with ASC 505, Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services, or ASC 505, under which compensation expense is generally recognized over the vesting period of the award.

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors, or our Board, as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock and our Board's assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. Our common stock valuations were prepared using the hybrid method, which used market approaches to estimate our enterprise value. The hybrid method is a probability-weighted expected return method, or PWERM, where the equity value in one or more of the scenarios is calculated using an option-pricing method, or OPM. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. Third-party valuations were performed at various dates, which resulted in valuations of our common stock of \$0.35 per share as of November 8, 2015, \$1.21 as of November 8, 2016, and \$0.553 per share as of February 2, 2018. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, which may be a date later than the most recent third-party valuation date, including:

- § the prices at which we sold shares of preferred stock and the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- § the progress of our research and development programs, including the status of preclinical studies and planned clinical trials for our product candidates;
- § our stage of development and commercialization and our business strategy;
- § external market conditions affecting the pharmaceutical and biotechnology industries, and trends within the biotechnology industry;
- § our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- § the lack of an active public market for our common stock and our preferred stock;
- § the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company in light of prevailing market conditions; and

§ the analysis of initial public offerings and the market performance of similar companies in the biopharmaceutical industry.

The assumptions underlying these valuations represent management's best estimates, which involve inherent uncertainties and the application of management judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different.

Options Granted

The following table sets forth by grant date the number of shares subject to options granted between January 1, 2016 and the date of this prospectus, the per share exercise price of the options and the fair value of common stock per share on each grant date:

Grant Date	Number of Shares Subject to Options Granted	Per Share Exercise Price of Options	Fair Value of Common Stock Per Share on Grant Date
February 10, 2016	645,139	\$ 0.35	\$ 0.35
August 10, 2016	465,617	\$ 0.35	\$ 0.35
August 30, 2016	235,000	\$ 0.35	\$ 0.35
December 7, 2016	150,000	\$ 1.21	\$ 1.21
March 15, 2017	219,000	\$ 1.21	\$ 1.21
May 31, 2017	18,000	\$ 1.21	\$ 1.21
March 7, 2018 ⁽¹⁾	13,645,767	\$ 0.55	\$ 0.55

(1) We also issued 2,146,767 restricted stock units on March 7, 2018 to Kevin Gordon, our new President and Chief Financial Officer.

For stock awards after the completion of this offering, our Board intends to determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant.

The intrinsic value of all outstanding options as of the date of this prospectus was \$ million based on the estimated fair value of our common stock of \$ per share, which is the assumed initial public offering price per share of our common stock based on the midpoint of the estimated price range set forth on the cover of this prospectus.

If factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense. To the extent that our assumptions are incorrect, the amount of stock-based compensation recorded will change.

Convertible Instruments

We have utilized various types of financing to fund our business needs, including convertible debt and convertible preferred stock, in some cases with corresponding warrants. We considered guidance within FASB ASC 470-20, *Debt with Conversion and Other Options*, or ASC 470-20, ASC 480, *Distinguishing Liabilities from Equity*, or ASC 480, and ASC 815, *Derivatives and Hedging*, or ASC 815, when accounting for the issuance of convertible securities. Additionally, we review the instruments to determine whether they are freestanding or contain an embedded derivative and, if so, whether they should be classified in permanent equity, mezzanine equity or as a liability at each reporting period until the amount is settled and reclassified into equity.

When multiple instruments are issued in a single transaction, we allocate total proceeds from the transaction among the individual freestanding instruments identified. The allocation is made after identifying all the freestanding instruments and the subsequent measurement basis for those instruments. The subsequent measurement basis determines how the proceeds are allocated. Generally, proceeds are allocated based on one of the following methods:

- § Fair value method—The instrument being analyzed is allocated a portion of the proceeds equal to its fair value, with the remaining proceeds allocated to the other instruments as appropriate.
- § Relative fair value method—The instrument being analyzed is allocated a portion of the proceeds based on the proportion of its fair value to the sum of the fair values of all the instruments covered in the allocation.
- § Residual value method—The instrument being analyzed is allocated the remaining proceeds after an allocation is made to all other instruments covered in the allocation.

Generally, when there are multiple instruments issued in a single transaction that have different subsequent measurement bases, the proceeds from the transaction are first allocated to the instrument that is subsequently measured at fair value (i.e., instruments accounted for as a derivative liabilities) at its issuance date fair value, with the residual proceeds allocated to the instrument not subsequently measured at fair value. In the event both instruments in the transaction are not subsequently measured at fair value (i.e., equity-classified instruments), the proceeds from the transaction are allocated to the freestanding instruments based on their respective fair values, using the relative fair value method.

After the proceeds are allocated to the freestanding instruments, resulting in an initial discount on the host contract, those instruments are further evaluated for embedded features (i.e., conversion options) that require bifurcation and separate accounting as a derivative financial instrument pursuant to ASC 815. Embedded derivatives are initially and subsequently measured at fair value. Under ASC 815, a portion of the proceeds received upon the issuance of the hybrid contract is allocated to the fair value of the derivative.

We account for convertible instruments in which it is determined that the embedded conversion options should not be bifurcated from their host instruments in accordance with ASC 470-20. Under ASC 470-20, we record, when necessary, discounts to convertible notes or convertible preferred stock for the intrinsic value of conversion options embedded in the convertible instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the transaction and the effective conversion price embedded in the convertible instrument, unless limited by the proceeds allocated to such instrument.

Warrant Liabilities

We have classified warrants to purchase shares of Series C-1 preferred stock as liabilities on our balance sheets as these warrants were free-standing financial instruments that will require us to issue convertible securities upon exercise. The warrants were initially recorded at fair value on date of grant, and they will be subsequently remeasured to fair value at each reporting period. Changes in fair value of the warrants are recognized as a component of other income (expense) in our statements of operations and comprehensive loss. We will continue to adjust the liabilities for changes in fair value at each reporting period until the warrant liabilities are settled. Following the completion of this offering and the conversion of preferred stock into common stock, we will no longer include the warrant liabilities on the balance sheet or recognize changes in their fair value in the statements of operations and comprehensive loss since they will then be exercisable into shares of common stock.

We used the Black-Scholes option pricing model, which incorporates assumptions and estimates, to value the preferred stock warrants. We assessed these assumptions and estimates on a quarterly basis as additional information impacting the assumptions was obtained. Estimates and assumptions impacting the fair value measurement included the fair value per share of the underlying Series C-1 preferred stock, the remaining contractual term of the warrant, the risk-free interest rate, the expected dividend yield and the expected volatility of the price of the underlying preferred stock. We determined the fair value per share of

the underlying preferred stock by taking into consideration the most recent sales of our convertible preferred stock, results obtained from third-party valuations and additional factors that were deemed relevant. We estimated our expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrant. The risk-free interest rate was determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrant. Expected dividend yield was based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future.

Embedded Derivatives

Embedded derivatives that are required to be bifurcated from the underlying instrument are accounted for and valued as a separate financial instrument. In conjunction with our convertible instruments, embedded derivatives exist associated with the future consummation of a qualified financing event, as defined, and a subsequent discounted conversion of the instrument to capital stock. The embedded derivatives are bifurcated and classified as derivative liabilities on the balance sheets and separately adjusted to their fair values at the end of each reporting period. Changes in fair values of the derivative liabilities are recognized as a component of other income (expense) in the statements of operations and comprehensive loss.

Issuance Costs Related to Equity and Debt

We allocate issuance costs between the individual freestanding instruments identified on the same basis as proceeds were allocated. Issuance costs associated with the issuance of stock or equity contracts (i.e., equity-classified warrants and convertible preferred stock) are recorded as a charge against the gross proceeds of the offering. Any issuance costs associated with the issuance of liability-classified warrants are expensed as incurred. Issuance costs associated with the issuance of debt (i.e., convertible debt) are recorded as a direct reduction of the carrying amount of the debt liability, but limited to the notional value of the debt. We account for debt as liabilities measured at amortized cost and amortizes the resulting debt discount to interest expense using the straight-line method over the expected term of the notes pursuant to ASC 835, *Interest* (ASC 835). To the extent that the reduction from issuance costs of the carrying amount of the debt liability would reduce the carrying amount below zero, such excess is recorded as interest expense.

Income Taxes

We file U.S. Federal income tax returns and North Carolina State tax returns. Our deferred tax assets primarily consist of Federal and State tax net operating losses and tax credit carryforwards and are recorded using enacted tax rates expected to be in effect in the years in which these temporary differences are expected to be utilized. As of December 31, 2017, we had Federal net operating loss carryforwards of \$96.9 million that begin to expire in 2027 for Federal purposes and \$97.9 million that begin to expire in 2022 for State purposes. The utilization of the credit carryforwards to reduce future income taxes will depend on our ability to generate sufficient taxable income prior to the expiration of the carryforwards. We may be subject to the net operating loss utilization provisions of Section 382 of the Code. The effect of an ownership change would be the imposition of an annual limitation on the use of net operating loss carryforwards attributable to periods before the change. The amount of the annual limitation depends upon our value immediately before the ownership change, changes to our capital during a specified period prior to the change and the Federal published interest rate. Our management estimates and records a valuation allowance against deferred tax assets when realization of the tax benefit is uncertain. A valuation allowance is recorded, if necessary, to reduce net deferred taxes to their realizable values if our management does not believe it is more likely than not that the net deferred tax assets will be realized.

On December 22, 2017, the Tax Cuts and Jobs Act, or the TCJA, was enacted into law. This new law includes significant changes to the U.S. corporate income tax system, including a permanent reduction in the corporate income tax rate from 35% to 21%, limitations on the deductibility of interest expense and executive compensation and the transition of U.S. international taxation from a worldwide tax system to a territorial tax system. The TCJA also limits interest expense deductions to 30% of taxable income before interest, depreciation and amortization from 2018 to 2021 and then taxable income before interest thereafter. The TCJA permits disallowed interest expense to be carried forward for five years. We have

calculated our best estimate of the impact of the TCJA in our year-end income tax provision in accordance with our understanding of the TCJA and guidance available at the time. The overall impact of the TCJA resulted in a decrease to the deferred tax assets and a corresponding decrease to the valuation allowance of \$14.1 million. Using the guidance issued by the SEC staff in Staff Accounting Bulletin No. 118, we expect to complete the accounting for the TCJA when our 2017 U.S. federal income tax return is filed in 2018.

Research and Development Expenses

When preparing our financial statements, we are required to estimate our research and development expenses. This process involves reviewing open contracts and communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. Payments under some of the contracts we have with parties depend on factors, such as successful enrollment of certain numbers of patients, site initiation and the completion of clinical trial milestones. When accruing clinical expenses, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If possible, we obtain information regarding unbilled services directly from our service providers. However, we may be required to estimate the cost of these services based only on information available to us. If we underestimate or overestimate the cost associated with a trial or service at a given point in time, adjustments to research and development expenses may be necessary in future periods. Historically, our estimated research and development expenses have approximated actual expenses incurred.

Fair Value of Financial Instruments

The carrying values of cash, accounts receivable, accounts payable and related party receivables at December 31, 2017 approximated their fair value due to the short maturity of these instruments.

Our valuation of financial instruments is based on a three-tiered approach, which requires that fair value measurements be classified and disclosed in one of three tiers. The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

- § Level 1 — Quoted prices in active markets for identical assets or liabilities;
- § Level 2 — Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly; and
- § Level 3 — Unobservable inputs for the asset and liability used to measure fair value, to the extent that observable inputs are not available.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

JOBS Act

As an "emerging growth company" under the JOBS Act, we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards when they are required to be adopted by public companies that are not emerging growth companies.

Subject to certain conditions, as an emerging growth company, we intend to rely on certain of these exemptions, including without limitation:

- § only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- § reduced disclosure about our executive compensation arrangements;
- § no advisory votes on executive compensation or golden parachute arrangements; and
- § exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of 2023; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2017.

	Payments Due by Period				Total
	(in thousands)				
	Less than 1 Year	1-3 Years	3-5 Years	More Than 5 Years	
Long-term debt obligations ⁽¹⁾	\$ 33,180	\$ 5,577	\$ —	\$ —	\$ 38,757
Operating lease obligations ⁽²⁾	968	2,019	2,128	4,159	9,274
Capital lease obligations ⁽³⁾	489	530	—	—	1,019
Total	\$ 34,637	\$ 8,126	\$ 2,128	\$ 4,159	\$ 49,050

⁽¹⁾ Consists of our (i) \$9.1 million balance under our loan facility with PWB, (ii) \$2.3 million promissory note issued to UNC, and (iii) \$27.4 million of convertible notes, which were converted into Series D preferred stock in February 2018.

⁽²⁾ Consists of obligations under (i) two multi-year, non-cancelable building leases for our facilities in Morrisville, North Carolina, which expire on October 31, 2026, (ii) our agreement with Chasm Technologies, Inc. for services related to our manufacturing facilities, and (iii) copier equipment under a lease which expires in 2019.

⁽³⁾ Consists of (i) leases for specialized lab equipment and (ii) an agreement with a commercial manufacturer to build a PRINT particle fabrication line.

We have two leases for our facilities in Morrisville, North Carolina. In January 2017, the leases were amended to extend the term through October 31, 2026. Our contractual commitments under the leases as of December 31, 2017 total \$9.3 million.

We have drawn down an aggregate of \$10.0 million from our loan agreement with PWB as of December 31, 2017. Our contractual commitments under the LSA as of December 31, 2017 consist of an aggregate of \$9.1 million in repayment obligations, inclusive of related interest amounts. See "—Liquidity and Capital Resources—Sources of Liquidity" for additional information regarding the LSA.

This table does not include any potential milestone or royalty payments we may be required to make under the UNC License because the amount and timing of when those payments will actually be made is uncertain and the payments are contingent upon the initiation and completion of future activities.

We enter into contracts in the normal course of business with CROs, clinical trial sites and manufacturing organizations and with vendors for preclinical studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and, therefore, we believe that our non-cancelable obligations under these agreements are not material and they are not included in the table above.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks related to changes in foreign currency exchange rates and interest rates.

We contract with suppliers in foreign countries. As such, we have exposure to adverse changes in exchange rates of foreign currencies, principally the Euro, associated with our foreign transactions. We believe this exposure to be immaterial. We currently do not hedge against this exposure to fluctuations in exchange rates.

Our exposure to market risk also relates to interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. As of December 31, 2017, excluding capital leases and excluding convertible notes that were converted into Series D preferred stock in February 2018, our aggregate outstanding indebtedness was \$11.3 million, which bears interest at rates varying from 3.75% to 5.0% or LIBOR plus 3.0%. Due to the short-term duration of our indebtedness, an immediate one percentage point change in interest rates would not have a material effect on our financial position or results of operations.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

BUSINESS

Overview

We are a late-stage clinical biopharmaceutical company focused on the development and commercialization of human therapeutics using our proprietary PRINT® technology to transform the lives of patients. PRINT is a particle engineering platform that enables precise production of uniform drug particles designed to improve the safety, efficacy and performance of a wide range of therapies. We are currently focused on the development of two product candidates for which we hold worldwide commercial rights: LIQ861 for the treatment of pulmonary arterial hypertension, or PAH, and LIQ865 for the treatment of local post-operative pain. Our lead product candidate, LIQ861, is being evaluated in a Phase 3 trial. LIQ861 is an inhaled dry powder formulation of treprostinil designed to improve the therapeutic profile of treprostinil by enhancing deep-lung delivery and achieving higher dose levels than current inhaled therapies. We have applied our PRINT technology to enable us to deliver LIQ861 through a convenient, disposable dry powder inhaler, or DPI. Our second product candidate, LIQ865, currently being evaluated in a Phase 1 trial, is designed to deliver sustained-release particles of bupivacaine, a non-opioid anesthetic, to treat local post-operative pain for three to five days through a single administration. In addition to developing our two product candidates, we collaborate, and intend to collaborate, with leading pharmaceutical companies to develop their own product candidates across a wide range of therapeutic areas, molecule types and routes of administration, leveraging our PRINT technology.

Our lead product candidate, LIQ861, is an inhaled, dry powder formulation of treprostinil designed for enhancing deep-lung delivery using a convenient DPI for the treatment of PAH, a chronic, progressive disease caused by the hardening and narrowing of the pulmonary arteries that can lead to right heart failure and eventually death. Treprostinil is a synthetic analog of prostacyclin, a vasoactive mediator essential to normal lung function that is deficient in patients with PAH. PAH is a rare disease, with an estimated prevalence in the United States expected to be between 25,000 and 30,000 patients by 2020. Decision Resources Group, an independent industry research firm, estimated that in 2016 more than 50% of patients with PAH in the United States were prescribed treprostinil across its three routes of administration (oral, inhaled and parenteral infusion), generating revenue that represented about one-third of the approximately \$3.7 billion U.S. market for PAH drug therapies. The inhaled route of administration, in which medication is inhaled directly into the lungs, helps minimize the off-tissue adverse side effects of systemic delivery by delivering the drug directly where it is needed. Tyvaso® (treprostinil, inhaled solution), marketed by United Therapeutics Corporation in the United States, is the standard of care among the inhaled therapies, with more than 80% of inhaled prostacyclin sales in the United States. Current inhaled therapies, including Tyvaso, are delivered by a nebulizer, a device that converts a liquid formulation into mist, and require between four and nine doses per day. Nebulizers require regular care and maintenance, including daily cleaning and access to additional parts and supplies, such as distilled water and a power source, all of which compromise the portability of the device and the quality of life of patients.

We believe LIQ861, if approved, will be the first-to-market inhaled dry powder treprostinil that can be delivered using a convenient, palm-sized, disposable DPI. We believe LIQ861 can overcome the limitations of current inhaled therapies and has the potential to maximize the therapeutic benefits of treprostinil in treating PAH by safely delivering higher doses into the lungs. Based on our *in vitro* studies we believe that the precise size, trefoil-like shape and uniformity of each LIQ861 particle may provide deep-lung delivery of treprostinil and reduces deposition in the upper airway where irritation and pain have been observed with nebulized treprostinil. In March 2017, we completed a Phase 1 trial of LIQ861 in 57 healthy volunteers in which LIQ861 was well-tolerated at all doses tested up to 150 mcg, which we estimate is equivalent to approximately twice the maximum recommended dosage of Tyvaso, and showed a proportional dose-response in pharmacokinetics. We estimate that the 75 mcg dose of LIQ861, delivered in one to two breaths, is approximately equivalent to the maximum recommended dosage of Tyvaso (54 mcg, delivered in nine breaths). After consultation with the U.S. Food and Drug Administration, or the FDA, we advanced

from this Phase 1 trial into our current single, pivotal Phase 3 trial, known as INSPIRE, or Investigation of the Safety and Pharmacology of Dry Powder Inhalation of TreprostiniL. We will seek approval of LIQ861 under the 505(b)(2) pathway, which would allow us to rely in part on the FDA's previous findings of efficacy and safety of Tyvaso and the active ingredient treprostiniL, which has been approved in four different products administered through the continuous infusion (parenteral), inhaled and oral routes. In January 2018, we announced the initiation of INSPIRE evaluating LIQ861 for the treatment of PAH in the United States. If approved, we believe LIQ861 will have the potential to increase the number of patients using the inhaled route of treatment for PAH by providing the benefits of inhaled prostacyclin therapy earlier in a patient's disease progression as well as delaying the burden of starting continuously infused products.

Our second product candidate, LIQ865, is an injectable, sustained-release formulation of bupivacaine for the management of local post-operative pain for three to five days after a procedure. We believe LIQ865, if approved, has the potential to provide significantly longer local post-operative pain relief compared to currently marketed formulations of bupivacaine. We estimate that there were over 40 million surgeries in our target market, which consists of orthopedic and soft tissue surgeries, performed in the United States in 2016. According to IMS Health, an independent market research firm, the global market for local anesthetics was approximately \$776 million in 2016. Despite current pain-management protocols, post-operative pain is still undermanaged, with studies showing that approximately 50% of patients self-report inadequate pain relief. Post-operative pain management is becoming more important as surgeries increase in volume and complexity and hospitals seek treatments that support faster recovery and time to discharge. Concurrently, the risk of opioid abuse and diversion has led physicians, payors and the U.S. federal government to prioritize pain management strategies that minimize reliance on opioids. Local anesthetics, such as bupivacaine, provide a well-established, non-opioid option for post-operative pain management, but their duration of efficacy has been limited to eight hours or less. The FDA has approved one long-acting local anesthetic, liposomal bupivacaine, but pain relief typically lasts only 24 to 36 hours, according to physicians, and its use in combination with other local anesthetics can result in an unsafe release of drug. In LIQ865, we have engineered the size and composition of the LIQ865 PRINT particles to release bupivacaine over three to five days through a single administration. We have completed one Phase 1 clinical trial of LIQ865 in Denmark and a second Phase 1 trial is ongoing in the United States. We expect to initiate Phase 2-enabling toxicology studies in the second half of 2018.

Both LIQ861 and LIQ865 are being developed using our proprietary PRINT particle engineering technology, which allows us to engineer and manufacture highly uniform drug particles with independent control over their size, three-dimensional geometric shape and chemical composition. By controlling these physical and chemical parameters of particles, PRINT enables us to target and design desirable pharmacological benefits into product candidates, including prolonged duration of drug release, increased drug loading, a more convenient method of administration, novel combination products, enhanced storage and stability and the potential to reduce adverse side effects. We have scaled PRINT manufacturing to meet the demands of clinical development and, we believe, commercial production. Our approach enables us to design and produce custom micro- and nano-particles containing existing or new small molecule drugs or biologics. For example, we have engineered LIQ861 so that each particle has an ideal aerodynamic size and shape for deep-lung delivery. Our PRINT particle engineering technology also allows us to design the chemical composition of particles to control drug release ranging from minutes, days, weeks or months as needed to meet a target profile, such as LIQ865's three to five day release of bupivacaine.

Initially, our internal pipeline is focused on the development of improved and differentiated drug products containing FDA-approved active pharmaceutical ingredients, or APIs, with established efficacy and safety profiles, which we believe are eligible for the 505(b)(2) regulatory pathway to seek marketing approval in the United States. The 505(b)(2) regulatory pathway can be capital efficient and potentially enable a shorter time to approval. We intend to seek marketing approval in the United States for LIQ861 and LIQ865 under the 505(b)(2) regulatory pathway, which would allow us to rely in part on existing knowledge of the safety and efficacy of the reference listed drugs. The FDA has indicated that it considers LIQ861, which is

delivered by a DPI, to be a drug-device combination product and, accordingly, the DPI will be evaluated as part of our new drug application, or NDA, filing.

In addition to building our own internal pipeline, we collaborate with leading pharmaceutical companies to develop their own product candidates, leveraging our PRINT technology across a wide range of therapeutic areas, molecule types and routes of administration. Through our collaboration arrangements with established pharmaceutical leaders, such as GlaxoSmithKline plc and its subsidiaries, collectively, GSK, we apply PRINT technology to novel molecules. If our product candidates receive marketing approval, we plan to commercialize them in the United States by establishing our own sales force and commercial infrastructure. Outside of the United States, we intend to pursue the regulatory approval and commercialization of our product candidates with leading pharmaceutical companies with regional expertise. We intend to manufacture our product candidates using in-house capabilities. Where appropriate, we will rely on contract manufacturing organizations, or CMOs, to produce, package and distribute our approved drug products on a commercial scale.

Product Pipeline

The following table summarizes key information about clinical-stage product candidates being developed using PRINT technology.

Product	Indication	Formulation & Route	Phase 1	Phase 2	Phase 3	Next Key Milestone	Worldwide Commercial Rights
LIQ861 ¹	PAH	Dry powder inhalation				Interim safety data 1H:19	Liquidia
LIQ865	Local, post-operative pain	Sustained-release injectable				Ph2-enabling studies 2H:18	Liquidia
CCI15106	COPD ²	Dry powder inhalation					GSK

1. After consultation with the FDA, we advanced from a Phase 1 trial directly to a single, pivotal Phase 3 trial and will seek approval under the 505(b)(2) pathway
 2. COPD is chronic obstructive pulmonary disease

Our Strategy

Our goal is to develop and commercialize medicines with improved and differentiated product profiles based on our PRINT particle engineering technology. To achieve this goal, we intend to execute the following key elements of our business strategy:

- § **Complete the pivotal, safety and pharmacology Phase 3 trial for our lead product candidate, LIQ861, in PAH.** We initiated INSPIRE, a single, open-label Phase 3 trial, in 100 patients with PAH. We believe, based on feedback from the FDA, that this will support the NDA filing for our novel inhaled dry powder inhaled formulation of treprostinil to treat PAH. We expect to release interim safety data from INSPIRE in the first half of 2019.
- § **Advance our local post-operative pain product candidate, LIQ865, through Phase 2-enabling toxicology studies.** We have completed one Phase 1 clinical trial of LIQ865, our novel long-acting formulation of bupivacaine, in Denmark and we are conducting a second Phase 1 clinical trial in the United States. We expect to initiate Phase 2-enabling toxicology studies in the second half of 2018.

- § **Secure regulatory approval and commercialize our internal product candidates independently in the United States and with leading pharmaceutical companies globally.** We hold worldwide commercialization rights to LIQ861 and LIQ865. Subject to receiving marketing approval which we intend to pursue in the United States via the 505(b)(2) regulatory pathway, we intend to independently pursue the commercialization of LIQ861 in the United States by establishing targeted sales and marketing teams. After reviewing the results of our Phase 2-enabling toxicology studies for LIQ865, and subject to the availability of sufficient funding, we will develop and commercialize LIQ865 independently, if it is ultimately approved, or seek to license this product candidate to one or more third parties. Outside of the United States, we intend to pursue the regulatory approval and commercialization of LIQ861 and LIQ865 with leading pharmaceutical companies with regional expertise.
- § **Expand our internal pipeline leveraging our PRINT technology.** We intend to continue targeting diseases where we believe our PRINT technology can improve the efficacy, safety and patient experience of current treatments that have been impaired by suboptimal drug product formulation and delivery. We plan to focus initially on the development of improved and differentiated drug products containing FDA-approved APIs with proven efficacy and safety profiles eligible to use the 505(b)(2) regulatory pathway. In addition, we may expand our clinical development of LIQ861 and LIQ865, where appropriate, into broader indications or new applications.
- § **Pursue strategic collaborations to maximize the value of products enabled by PRINT technology.** In addition to advancing our own internal product candidates, we intend to continue collaborating with leading pharmaceutical companies to develop their own product candidates across a wide range of therapeutic areas, molecule types and routes of administration, leveraging our PRINT technology. Our collaborations help advance new PRINT capabilities, while adding to our intellectual property portfolio.

Our Competitive Strengths

We believe that we have several key strengths that have contributed to the development of our business and that will help us to realize our goal of becoming a biopharmaceutical company across research, development and commercialization activities. Our competitive strengths include:

- § **Our PRINT technology gives us the capability to overcome the constraints of conventional formulation and production methods and can be applied broadly across therapeutic areas, molecule types and routes of administration.** Our PRINT technology allows us to precisely engineer drug particles in a wide variety of compositions, sizes and shapes and achieve a high level of control over the physical and chemical characteristics of drug particles, as compared to conventional formulation and production methods. PRINT particles can be designed to address specific pharmacological or therapeutic objectives, such as enhancing the route of administration, improving solubility, enhancing stability or extending therapeutic effects. Using our PRINT technology, we are able to engineer, among others, small molecule and biologic particles, single agent drug and combination drug particles and vaccine particles to improve efficacy, safety and convenience for patients. Our internal pipeline strategy is currently focused on developing proprietary innovations to currently approved drug products in order to minimize development risks and increase speed to market.

In particular, we have designed LIQ861 to maximize the therapeutic benefits of treprostinil in treating PAH by safely delivering higher doses into the lungs using a convenient, palm-sized, disposable DPI. We believe that this may lead to a more attractive product profile with a more convenient method of administering the drug, as compared to the existing inhaled therapies that are currently available. We have also designed LIQ865 with the intention of providing patients with local post-operative analgesia for three to five days. We believe this would provide a longer period of pain relief than the existing local-acting pain drugs that are available, which could be a positive feature in light of interest in reducing the patient's reliance on opioids and non-steroidal anti-inflammatory drugs, or NSAIDs, for local post-operative pain management.

Our PRINT technology is broadly applicable — across therapeutic areas, molecule types and routes of administration — providing us with opportunities for future drug product development.

- § **We have scaled operations with rapid and cost-effective transition to clinical development and commercial production.** We believe our research and development operations and PRINT technology allow us to transition rapidly and cost-effectively from laboratory to clinical development and ultimately commercial-scale manufacture of drug particles. Utilizing well-established techniques from other roll-to-roll manufacturing processes, we have scaled PRINT technology to support the quality and quantity needs for clinical and, we believe, commercial production of our product candidates. The physical equipment for the PRINT technology requires a relatively small footprint, low capital investment and minimal operating costs. We believe our manufacturing facilities comply with the FDA's current good manufacturing practices, or cGMP, requirements.
- § **We have a strong proprietary position through a combination of patents, trade secrets, proprietary know-how and licensing arrangements.** We protect our PRINT technology and the resulting engineered particles through a combination of patents, trade secrets, proprietary know-how and licensing arrangements. We have an active patent strategy that covers major geographic markets, including the United States, Europe and Japan. As of March 9, 2018, our patent portfolio, which includes patents and patent applications we own or co-own, as well as patents and patent applications we have licensed from third parties, such as the University of North Carolina at Chapel Hill, or UNC, comprises 81 issued patents and 45 pending patent applications worldwide. As we develop new product candidates, either independently or with collaborators, we will seek additional patent protection.
- § **We have strong capabilities in pharmaceutical research and clinical development.** Our research and development team includes 27 employees, led by our senior management, and has extensive experience in clinical development and pharmaceutical research and development activities in our specific areas of research interest.
- § **We have a seasoned management team.** Our team includes industry veterans with significant experience in drug discovery, development and commercialization. Members of our leadership team have worked across different segments of the pharmaceutical industry, including branded and generic pharmaceuticals, medical devices and manufacturing services. Prior to joining us, our Chief Executive Officer and director, Neal Fowler, served as president of Centocor, Inc., a subsidiary of Johnson & Johnson that is focused on the development and commercialization of biomedicines used to treat chronic inflammatory diseases. Additionally, our President and Chief Financial Officer, Kevin Gordon, previously served as executive vice president and chief operating officer and chief financial officer of Quintiles Transnational Holdings Inc. (now named IQVIA Holdings Inc.), a global biopharmaceutical services provider, and our Chief Operations Officer, Robert Lippe, previously served as executive vice president of operations and chief operations officer at Alexza Pharmaceuticals, Inc. Furthermore, our Senior Vice President, Product Development, Dr. Robert Roscigno, previously served as the executive vice president of GeNO, LLC, where he led the clinical development team working on a novel nitric oxide delivery system, and before that he served as the president and chief operating officer of Lung Rx, Inc., where he was part of the team responsible for bringing Tyvaso through Phase 3 development, and he previously served in multiple leadership positions at United Therapeutics Corporation and its subsidiaries, contributing to the successful development and worldwide commercialization of Remodulin™, which is treprostinil administered through subcutaneous or intravenous infusion, for the treatment of PAH. We believe that their experience enables us to evaluate opportunities and build collaboration arrangements that match the breadth of the potential applications for our PRINT technology.

Our Product Candidates

LIQ861

Our lead product candidate, LIQ861, is an inhaled dry powder formulation of treprostinil designed using our PRINT technology to enhance deep-lung delivery using a convenient DPI for the treatment of PAH. We believe LIQ861 can overcome the limitations of current inhaled therapies and has the potential to maximize the therapeutic benefits of treprostinil in treating PAH by safely delivering higher doses into the lungs. If approved, we believe LIQ861 will have the potential to increase the number of patients using the inhaled route of treatment for PAH by providing the benefits of inhaled prostacyclin therapy earlier in a patient's disease progression as well as delaying the burden of starting continuously infused products.

Background on PAH

PAH is a chronic, progressive disease caused by the hardening and narrowing of pulmonary arteries that can lead to right heart failure and eventually death. Prostacyclin is a vasoactive mediator essential to normal lung function that is deficient in patients with PAH. With PAH, the elevated pressure in the pulmonary arteries strains the right side of the heart as it pumps blood to the lungs. The extra stress causes the heart to enlarge and become less flexible, compromising its ability to push blood out of the heart through the lungs and into the rest of the body. PAH initially presents as exertional dyspnea, lethargy and fatigue and may be confused with other disease states with similar symptoms. PAH often goes undiagnosed or misdiagnosed until symptoms become severe, with the mean time from onset of symptoms to correct diagnosis being more than two years in the United States. As PAH progresses and right ventricular failure develops, exertional chest pain, or angina, exertional syncope and peripheral edema may develop. Following confirmation of diagnosis based on hemodynamic parameters, treatment is recommended to lower pulmonary pressures and treat the symptoms of PAH.

PAH is part of a larger classification of pulmonary hypertension, or PH, which is divided into five groups based on the criteria of the World Health Organization, or WHO, as defined at the 5th World Symposium on Pulmonary Hypertension in Nice, France. WHO Group I is comprised of individuals with PAH.

PAH is a rare disease, with an estimated prevalence in the United States expected to be between 25,000 and 30,000 patients by 2020. Today, the mean age of diagnosis is 50 years according to both French and U.S. registries, with more women being diagnosed with PAH than men. Patients may have idiopathic PAH, in which no underlying cause can be determined, or a heritable form of the disease. A large number of PAH patients also have associated comorbidities such as congenital heart disease, HIV, connective tissue diseases like scleroderma, liver diseases, systemic hypertension, obesity, clinical depression, non-PAH related obstructive airways, sleep apnea and diabetes.

Due to delayed diagnosis, many patients already have an advanced form of PAH, requiring aggressive treatment combining multiple classes of therapy. The severity of PAH may be classified according to the heart failure guidelines of the New York Heart Association, or NYHA, based on how much patients are limited during physical activity and described by the American Heart Association as follows:

- § NYHA Class I — No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation or dyspnea, which is shortness of breath.
- § NYHA Class II — Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation or dyspnea.
- § NYHA Class III — Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation or dyspnea.
- § NYHA Class IV — Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

As reported by Decision Resources Group, net revenue in the U.S. market for PAH drug therapies in 2016 was estimated to be \$3.7 billion. Of such amount, \$2.0 billion was generated from patients in NYHA

Class III, \$1.2 billion was generated from patients in NYHA Class II and an aggregate of \$0.5 billion was generated from patients in NYHA Classes I and IV.

As the disease progresses, these symptoms cause significant negative impact on the quality of life of patients, limiting their ability to do common daily activities, including work, travel and previous hobbies. Patients also describe the emotional toll of PAH, including fear, frustration, embarrassment and stigma. The burden of care associated with currently available treatments can add further logistical and emotional burden to the patients.

Current Therapies and Their Limitations

There is currently no cure for PAH. The goals of existing treatments are to alleviate symptoms, maintain or improve NYHA functional class, delay disease progression and improve quality of life. Inhaled therapies are generally prescribed for, but not limited to, patients in NYHA Class II and Class III. Approved drugs target three distinct molecular pathways that have been implicated in the disease process: the prostacyclin pathway, the nitric oxide pathway and the endothelin pathway. Drugs targeting each of these pathways are used alone or in combination with each other to treat patients with PAH. Prostacyclin deficiency in the lung is a central dysfunction in PAH, but can be supplemented with prostacyclin analogs. Prostacyclin deficiency can also be managed with a recently approved selective IP prostacyclin receptor agonist, selexipag. Nitric oxide deficiency can be treated with phosphodiesterase-5, or PDE5, inhibitors, which target a specific enzyme, increasing vasodilation. Endothelin overexpression in PAH patients causes vasoconstriction of pulmonary vasculature, but can be treated with endothelin receptor antagonists, or ERAs. Many physicians start their PAH patients on oral PDE5 inhibitors, oral ERAs or both. Drugs targeted to the prostacyclin pathway are usually added to these oral therapies, but can be used alone.

Drugs targeting the prostacyclin pathway are central to PAH therapy. Prostacyclin is essential to normal lung function. In healthy people, prostacyclin, which is a vasoactive mediator, is continually released by lungs into arterial circulation to bind different receptors for different effects to regulate vessel tone, including direct vasodilation of pulmonary arteries, inhibition of the proliferation of smooth muscle cells within arteries and inhibition of platelet aggregation. To supplement the deficiency of prostacyclin in patients with PAH, several prostacyclin analogs have been developed including epoprostenol, which is administered intravenously; treprostinil, which can be administered intravenously, subcutaneously or in nebulized or oral formulations; and iloprost, which can be administered intravenously or in nebulized form. A new class of drugs called selective IP prostacyclin receptor agonists help stimulate some of the mechanisms that would otherwise be promoted by prostacyclin or an analog. Selexipag is an oral drug and the only approved molecule in this new class.

The goal of treatment targeting the prostacyclin pathway is to maximize a patient's exposure to the highest tolerable level of drug. Prostacyclin analogs, like treprostinil, have been developed for continuous infusion, either intravenously or subcutaneously, inhalation using a nebulizer and oral administration in the form of tablets. The maximal efficacy benefit of any one drug in the prostacyclin pathway is partially limited by its specific safety profile. Drugs treating the prostacyclin pathway, including oral treprostinil and IP prostacyclin receptor agonists such as selexipag, are limited by side effects from binding of the drug to receptors in non-targeted tissues, such as the gut and nerves, which can cause diarrhea, nausea and jaw pain. Nebulized solutions can have side effects including cough and upper airway irritation and pain caused by their topical irritant properties, which limits the amount of drug that can be given to the patient. As the disease progresses, patients will require continuous prostacyclin infusion to maximize drug exposure. Infusion pumps present unique risks related to infusion site pain and the risk of blood stream infections, and increase significant limitations on the quality of life of patients.

Delivering prostacyclin analogs locally to the lungs by inhalation has been effective and generates fewer systemic side effects. Inhalation of prostacyclin analogs supplements the endogenous production of prostacyclin where it is normally synthesized, near the targeted pulmonary arteries. As a result, inhalation of prostacyclin analogs helps avoid adverse events related to off-target tissues and takes advantage of binding

key prostacyclin receptors that are preferentially expressed in the lung. The only inhaled prostacyclin analogs approved by the FDA are Tyvaso and Ventavis, which both require nebulizers.

Decision Resources Group reported that more than 80% of PAH patients on inhaled therapy in the United States used Tyvaso in 2016. In 2016, Tyvaso and Ventavis generated \$405 million and \$73 million, respectively, in total sales in the United States. Tyvaso is approved in the United States and Israel but is not approved in Europe and Japan. Tyvaso is indicated for the treatment of PAH to improve exercise ability. The maximum recommended dose of Tyvaso is 54 mcg, delivered four times daily from a proprietary nebulizer, requiring nine breaths for each dose. In a long-term open-label extension study of Tyvaso, patients continued treatment for a mean duration of 2.3 years, with 89% of patients achieving the target dose of 54 mcg, delivered in nine breaths, and 42% achieving a dose of 72 mcg, delivered in 12 breaths.

Ventavis is approved in the United States, Europe and Japan. Ventavis is nebulized six to nine times a day during waking hours, no more than once every two hours, and takes six to ten minutes to administer per use. Ventavis is a synthetic analog of prostacyclin indicated for the treatment of PAH to improve a composite endpoint consisting of exercise tolerance, symptoms and lack of deterioration.

Tyvaso and Ventavis require the use of proprietary nebulizers. Patients must follow specific instructions to set up and operate the device, clean the device daily, locate a power source or use a battery to operate the device, and carry the device and its associated accessories around in a large carrying case, along with distilled water, to administer the treatment throughout the day. As a result, the use of these approved inhaled prostacyclin therapies is typically limited to patients who have not responded to oral medications that target the three pathways. The current medical practice is to administer both an inhaled drug product and the patient's existing oral ERA and/or PDE5 drug product concurrently, instead of withdrawing the administration of the oral drug product upon initiation of the inhaled drug product.

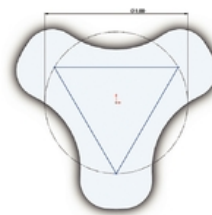
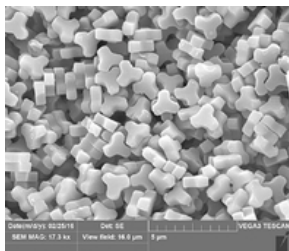
Potential Benefits of Our Approach

We believe LIQ861 can overcome the limitations of current nebulized therapies and has the potential to maximize the therapeutic benefits of treprostinil in treating PAH by safely delivering higher doses into the lungs using a convenient, palm-sized, disposable DPI. In our Phase 1 trial, LIQ861 was well-tolerated at doses twice as high as the maximum recommended dosage of Tyvaso. These higher doses of inhaled dry powder treprostinil can also be administered in fewer breaths. Each dose of LIQ861 can be administered in one to four breaths, compared to nine breaths for the maximum recommended dosage of Tyvaso. Additionally, we believe LIQ861 may have the potential to improve overall patient adherence and quality of life by offering the convenience of a discrete, palm-sized, disposable DPI. In our market research, patients expressed a preference for a DPI product, noting that it can fit easily into a purse, minimize hassle while traveling and reduce the breaths and time associated with their current nebulized treatments.

The advantages of the LIQ861 product profile are enabled by the PRINT technology. Each LIQ861 particle is designed to enhance delivery and deep-lung penetration. LIQ861 particles are a precise size and highly uniform since particles are formed from mold cavities that exactly match each other. Competing technologies, such as spray-drying, create particles that have a broader variation in shape and size. As a result, particles farther from the mean target size would be too large or too small to reach the intended location in the deep lung.

Inspired by a naturally occurring pollen, LIQ861 PRINT particles have a one micrometer trefoil-shape measured by an inscribed one micrometer circle as shown in the figure below. *In vitro* studies suggest that the uniformity of size and shape allow our inhaled particles to target delivery into the lungs while depositing less in the upper airways. Our independent control of the parameters of drug particles has enabled us to create the first clinically tested formulation that stabilizes treprostinil in an inhaled dry powder formulation.

The figures below depict LIQ861, with the figure on the left showing size and shape consistency among particles and the figure on the right showing their trefoil shape:



LIQ861 is administered using RS00 Model 8 DPI, a DPI manufactured by Plastiapipe, which has been approved in the United States and Europe. This device and its variants have been used in at least eight marketed products globally since 2001, including Novartis's Foradil Aerolizer®, for the treatment of asthma and chronic obstructive pulmonary disease, or COPD.

The picture below shows the DPI used to administer LIQ861:



Clinical Development

In March 2017, we completed a Phase 1 trial of LIQ861 in 57 healthy volunteers. In January 2018, we announced the initiation of INSPIRE, our single, pivotal open-label Phase 3 clinical trial, evaluating LIQ861 for the treatment of PAH in the United States. We expect to announce interim safety data from INSPIRE in the first half of 2019. In the United States, we plan to seek approval of our NDA under the 505(b)(2) regulatory pathway, which would allow us to rely, in part, on the FDA's prior conclusions of efficacy and safety for Tyvaso and the active ingredient treprostinil, which has been approved in four different products administered through the continuous infusion, inhaled and oral routes.

Results of Phase 1 Trial

We conducted a randomized, placebo-controlled, double-blind, Phase 1 trial in 57 healthy volunteer subjects to assess safety, tolerability and pharmacokinetics following a single administration of LIQ861 at doses between 25 mcg and 150 mcg. The subjects were enrolled into six dose cohorts. Within each dose cohort, subjects were randomized to receive LIQ861 or a placebo.

Dose Selection

For the first-in-human study, the initial dose for LIQ861 was chosen based on the indicated dosing for the reference listed drug, Tyvaso. Independent investigations of particle emission using the RS00 Model 8 DPI and simulated inspiration of the bulk powder from a nebulizer led to a projection that a 25 mcg treprostinil capsule for dry powder inhalation would result in approximately similar treprostinil administration as three

breaths of Tyvaso, or 18 mcg of treprostinil, the lowest approved dose through nebulization. The following table shows LIQ861's doses tested along with our estimate of the equivalent Tyvaso dose.

Estimated Treprostinil Dose from LIQ861			Estimated Treprostinil Dose from Tyvaso	
Capsule (fill wt.)	Approx. Emitted Dose	Breaths ¹	Approx. Emitted Dose	Breaths ²
25 mcg	20 mcg	1-2	18 mcg	3
50 mcg	40 mcg	1-2	36 mcg	6
75 mcg	60 mcg	1-2	54 mcg	9
100 mcg	80 mcg	1-2	Above maximum recommended dose	
125 mcg ¹	100 mcg	2-4	Above maximum recommended dose	
150 mcg ¹	120 mcg	2-4	Above maximum recommended dose	

⁽¹⁾ LIQ861 doses between 25 mcg and 100 mcg are single capsules. LIQ861 doses 125 mcg and 150 mcg are two capsules but if approved, they could be developed as single capsules and therefore only require one to two breaths.

⁽²⁾ Tyvaso (treprostinil) full prescribing information: initial dosage: 3 breaths (18 mcg); maximum recommended dosage: 9 breaths (54mcg)

Our conclusion from this study is that the 75 mcg dose of LIQ861 is approximately equivalent to the maximum recommended dose of 54 mcg, or nine breaths, of Tyvaso, and the 150 mcg dose of LIQ861 is approximately double the maximum recommended dose of Tyvaso.

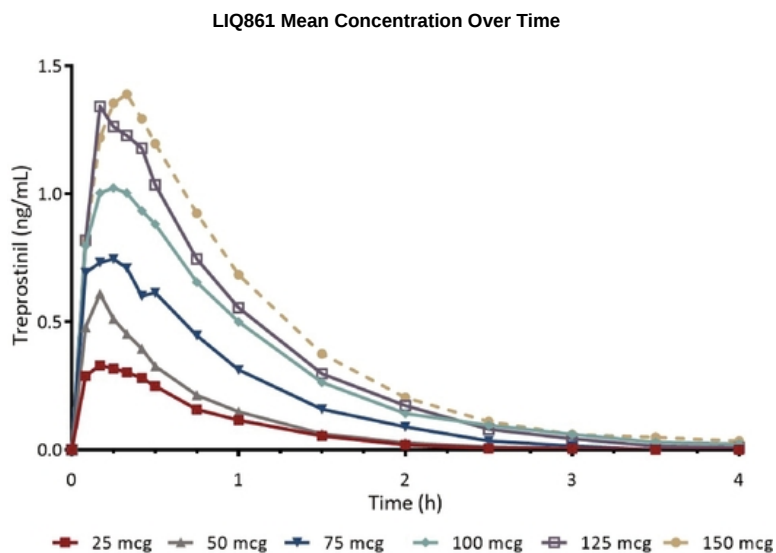
Safety and Tolerability

In the clinical trial, we escalated the dosage of LIQ861 progressively from 25 mcg to 150 mcg. There were no dose-limiting toxicities at the highest dose evaluated. We noted no serious adverse events or deaths and all reported treatment-emergent adverse events were mild. The most frequent adverse event reported by subjects on LIQ861 was mild cough and throat irritation.

We did not observe a proportional increase of treatment-emergent adverse events as the doses were escalated from 25 mcg to 100 mcg. No treatment-emergent adverse events were observed in subjects who received the placebo PRINT particles that contained only excipients.

Pharmacokinetics

In the trial, the LIQ861 plasma levels increased proportionally as the dosage of LIQ861 increased, as shown in the graph below. At higher doses, 50% of subjects receiving LIQ861 had measurable treprostinil after four hours, which could indicate the potential to minimize symptoms between dosing cycles.



The pharmacokinetic parameters in the table below were estimated from plasma samples. Nominal elapsed time from dosing was used to estimate all individual pharmacokinetic parameters, including:

- § C_{max} Maximum observed plasma concentration;
- § T_{max} Time of maximum concentration;
- § $T_{1/2}$ Terminal-phase half-life; and
- § AUC_{inf} Area under the plasma concentration-time curve.

LIQ861 Pharmacokinetic Results

	Treprostinil by Dose (mcg)					
	25	50	75	100	125	150
C_{max} (ng/mL)	0.329	0.572	0.728	1.08	1.19	1.33
T_{max} (h)	0.21	0.18	0.25	0.29	0.24	0.31
$T_{1/2}$ (h)	0.507	0.434	0.617	0.722	0.523	0.648
AUC_{inf} (h*ng/mL)	0.285	0.428	0.766	1.22	1.16	1.50

The LIQ861 blood levels, as determined by the area under the curve, which is a pharmacokinetic measurement of drug exposure in blood plasma over time, and the maximum concentration were similar to the data used in connection with the approval of Tyvaso. LIQ861 also had half-life in the blood similar to such data. These results suggest that our formulation has not changed the pharmacokinetic profile of inhaled treprostinil.

Results of Non-Clinical Studies

The pharmacology, pharmacokinetics and toxicology of treprostinil are well understood, having previously been characterized to support approval of Remodulin, which is treprostinil administered through subcutaneous or intravenous infusion, Orenitram®, which is treprostinil administered through extended release tablets, and Tyvaso, which is treprostinil inhaled through a proprietary nebulizer. We plan to rely in part on the data used in support of FDA approval of these treatments, in addition to our own toxicity studies, to support the development and approval of LIQ861.

In October 2016, we completed a 14-day, repeat dose, inhalation toxicity study in rats to support the Phase 1 trial. In August 2017, we completed a 26-week toxicology study in rats. In rats, pharmacokinetic profiles at the end of 14 days of LIQ861 treatment were generally similar to inhaled nebulized treprostinil delivered at similar treprostinil dose levels. Following 26 weeks of daily dosing, treprostinil exposure was slightly higher in LIQ861-treated rats. The results from this study support chronic outpatient dosing of LIQ861 in patients with PAH in our Phase 3 trial.

Phase 3 Trial

In January 2018, we announced the initiation of INSPIRE, our single, pivotal Phase 3 trial evaluating LIQ861 at doses between 25 mcg and 150 mcg for the treatment of PAH in the United States. INSPIRE is an open-label trial enrolling at least 100 patients with PAH across multiple sites in the United States. Primary endpoints are long-term safety and tolerability of LIQ861. Patients enrolled will have been on stable doses of Tyvaso for at least three months or will have been taking no more than two approved non-prostacyclin oral PAH therapies. A subset of patients will be enrolled in a one-directional crossover to compare bioavailability and pharmacokinetics of treprostinil as they transition from Tyvaso to LIQ861. We expect to announce interim safety data from INSPIRE in the first half of 2019.

Additional Clinical Trials

We also intend to conduct a clinical trial that explores the hemodynamic effects of LIQ861 in PAH patients. Although the FDA has not requested that we undertake this clinical trial, the data may help assess the effects of LIQ861 on acute and chronic hemodynamic measurements and right heart function. Data from this clinical trial would also add to our understanding of safety, tolerability and pharmacokinetics of LIQ861.

Commercial Opportunity

Decision Resources Group estimated that sales for all major PAH drugs in 2016 were more than \$6.0 billion in the United States, France, Germany, Italy, Japan and the United Kingdom. In the United States, products approved to treat PAH through the prostacyclin deficient pathway generated approximately \$1.7 billion in sales in 2016, of which the prostacyclin analog treprostinil generated the majority from products formulated for continuous infusion, inhalation using a nebulizer and oral delivery. The U.S. market for inhaled treatments through the prostacyclin deficient pathway was more than \$450 million in 2016, of which Tyvaso accounted for more than 80%.

If approved, we believe LIQ861 would be the first inhaled dry powder formulation of treprostinil delivered using a convenient, palm-sized, disposable DPI. The dosing regimens and patient experience for the two approved inhaled therapies compared to the expected product profile of LIQ861 are shown in the following table.

	Ventavis (iloprost) inhalation solution	Tyvaso (treprostinil) inhalation solution	LIQ861 (treprostinil) dry powder for inhalation (expected)
Regulatory status	FDA approved, 2004	FDA approved, 2009	Enrolling Phase 3 study
Method of administration	Proprietary nebulizer	Proprietary nebulizer	Dry powder inhaler
Frequency	6 to 9 times daily	4 times daily	4 times daily
Dose range	2.5 to 5 mcg	18 to 72 mcg; (max recommended is 54 mcg)	25 to 150 mcg
Time or breaths per dose	4 to 10 minutes depending on breathing pattern	9 breaths (54 mcg)	1-2 breaths per capsule, with 1 or 2 capsules per dose
Supplies required	<ul style="list-style-type: none"> § Ventavis Inhalation System § Power supply § Distilled water § 2 medication chamber assemblies § Washing basket § Battery charger § I-neb pouch § Carry bag § Power cord for charger § 2 Spare discs 	<ul style="list-style-type: none"> § Tyvaso Inhalation System § Rechargeable battery § 12V DC adapter § AC wall plug § 16 Medicine cups § Filter membranes § Plugs § Filter shell § Dome assembly with baffle plate § Inhalation piece § Mouthpiece § Water level cup § Carrying case § Distilled water carrier 	<ul style="list-style-type: none"> § Dry powder inhaler § Carrying pouch § Daily blister pack § Small cleaning brush

Preferred choice within inhaled options. As reported in our market research, physicians and patients expressed a clear preference for the expected product profile of LIQ861 over current nebulized therapies, primarily due to the ease and convenience of administration of LIQ861. Nebulized therapies require more time and breaths than LIQ861, as well as daily and weekly assembly, disassembly and cleaning.

Attractive switch from orals. The ease and range of dosing LIQ861 may be attractive to patients who are in earlier stages of the disease, but poorly managed on oral prostacyclin products. Local delivery of treprostinil to the lung offers fewer systemic side effects. However, we believe some of these patients are hesitant to switch to more burdensome nebulized options.

Delay transition to continuous infusion. We are investigating a wide range of LIQ861 doses in order to maximize patient exposure to treprostinil, a key factor in the efficacy of prostacyclin analogs. In our Phase 1 trial, LIQ861 was well-tolerated at levels that we estimate are twice the maximum recommended dose of Tyvaso. We believe the dose range enabled by LIQ861 would allow patients to titrate to higher levels of

treprostinil and potentially extend the time on inhaled therapy, delaying the eventual transition to continuous infusion.

Expand inhaled options outside the United States. We intend to develop and seek regulatory approval for LIQ861 for markets outside of the United States in order to provide an attractive choice that leverages the benefits of local delivery to the lung. Tyvaso is approved in the United States and Israel but is not approved in Europe and Japan. Ventavis is approved in the United States, Europe and Japan, but its use has been limited due to its delivery regimen. Decision Resources Group estimated that fewer than 10% of PAH patients in the United Kingdom, Germany, France, Italy and Spain, which we collectively refer to herein as the 5EU, use Ventavis. In Japan, Ventavis was approved in May 2016 as the first inhaled PAH treatment. The combined population of PAH patients in the 5EU and Japan was estimated to be more than 25,000 patients in 2016.

Expand beyond WHO Group I patients (PAH). Prostacyclin based therapies have only been approved for WHO Group I patients. However, prostacyclin analogs may have utility in the treatment of PH in other categories, as suggested by current off-label use in WHO Group III, which includes individuals with pulmonary hypertension secondary to lung diseases or hypoxemia, and WHO Group IV, which includes individuals with chronic thromboembolic pulmonary hypertension. Although we have no current plans to study LIQ861 in PH patients outside of WHO Group I, we will continue to monitor the investigations conducted by other companies and independent investigators of prostacyclin analogs, especially Tyvaso. If Tyvaso is approved for additional indications, the path for seeking approval of LIQ861 in the same indications should be made clear and could quickly follow. For example, United Therapeutics Corporation is actively studying Tyvaso in a Phase 3 trial of a subpopulation of WHO Group III subjects with pre-capillary PH with interstitial lung disease, including combined pulmonary fibrosis and emphysema, with an estimated prevalence of 27,500 patients globally in this subpopulation. By 2025, the diagnosed prevalence of all WHO Group III sub-types is expected to grow to over 250,000 patients in the United States, 5EU and Japan. WHO Group IV includes patients diagnosed with chronic thromboembolic pulmonary hypertension, or CTEPH. While considered underdiagnosed and undertreated, the current estimates for diagnosed prevalence of CTEPH in 2015 are between 2,000 and 6,500 patients in the United States and more than 10,000 patients in the 5EU and Japan.

Competition in PAH

If approved, LIQ861 would be one of several prostacyclin based products that can be used to manage a patient's disease. Initially, it would be positioned between the use of oral options and the continuous infusion of prostacyclin analogs.

In the inhaled category, the primary competitor for LIQ861 would be Tyvaso, the nebulized inhaled treprostinil. Tyvaso is administered by a proprietary nebulizer device four times per day. In addition to Tyvaso, LIQ861 would compete with inhaled iloprost, which is marketed as Ventavis in the United States by Actelion Pharmaceuticals Ltd, a subsidiary of Johnson & Johnson, and in Europe by Bayer Schering Pharma AG. Ventavis is administered by a proprietary nebulizer device six to nine times per day.

There would be additional competition from oral products in the prostacyclin pathway, including oral treprostinil, marketed as Orenitram by United Therapeutics Corporation, selexipag, marketed as Upravi by Actelion Pharmaceuticals Ltd., and ralinepag, being studied in a Phase 3 clinical trial by Arena Pharmaceuticals, Inc. These oral options may be used by a patient earlier in the disease cycle than LIQ861. However, we believe that LIQ861 could offer an attractive option for patients who are in earlier stages of the disease, but poorly managed on oral prostacyclin products.

Continuously infused prostacyclins include epoprostenol, marketed by multiple companies as generic and branded products, and treprostinil, marketed as Remodulin by United Therapeutics Corporation. These options are considered to offer the greatest efficacy and are usually prescribed to patients later in the disease. Infusion pumps present unique risks related to infusion site pain and the risk of blood stream infections, creating major limitations on the quality of life of patients.

We expect our other competitors could include potential new entrants such as MannKind Corporation, who has recently filed an IND and initiated a Phase 1 trial for a treprostinil product that applies a proprietary technology to form microparticles in an inhaled dry powder. We also expect generic equivalents of Tyvaso may eventually enter the market following the expiry or invalidity of Tyvaso's patents, which are currently being challenged by a generics company.

LIQ865

Our second product candidate, LIQ865, which is designed using PRINT technology, is an injectable, sustained-release formulation of bupivacaine for the management of local post-operative pain for three to five days after a procedure, which we believe, if approved, would have the potential to provide significantly longer post-operative pain relief compared to currently marketed formulations of bupivacaine.

Background on Post-Operative Pain

The treatment of post-operative pain typically involves multi-modal therapy including the administration of local anesthetics after surgery. Although local anesthetics provide a well-established, safe and efficacious option for post-operative pain management, the duration of efficacy for conventional local anesthetics, including bupivacaine and lidocaine, is limited, with the pain relief typically lasting for eight hours or less. Because post-operative pain may continue to be severe for several days following the surgery, additional therapies are required. These therapies include morphine and other opioids administered through intravenous systems or orally, as well as various non-opioids, including acetaminophen and NSAIDs, like ibuprofen and ketorolac.

Current Therapies and Their Limitations

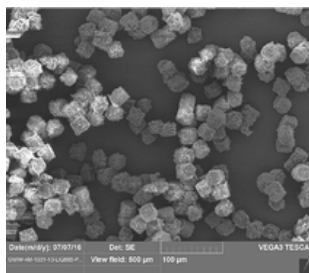
Opioids are the mainstay of post-operative pain management, but they are associated with a variety of unwanted and potentially serious or life-threatening side effects such as sedation, nausea, constipation, cognitive impairment, respiratory depression and death. In addition, opioids may be administered through patient-controlled analgesia systems, which may interfere with or delay patient ambulation and require significant hospital resources to implement and monitor. Furthermore, exposure to opioids for as little as four days can lead to increased risk of chronic opioid use. The risk of opioid abuse and diversion has led physicians, payors and the U.S. federal government to prioritize pain management strategies that minimize the use of opioids.

NSAIDs and other non-opioids for pain relief in the post-operative period are also associated with various undesirable side effects. Bleeding and gastrointestinal and renal complications may result from NSAID use. Acetaminophen can cause liver injury or failure with excessive dosing. As a result, we believe there is demand from healthcare providers and patients for post-operative pain relief therapies that can help prevent these issues.

Local anesthetics such as bupivacaine hydrochloride, or Marcaine, and lidocaine have been safely used for post-operative pain for decades, but have a duration of effect limited to less than eight hours. Approved in 2011, EXPAREL is a long-acting local anesthetic that involves an injection of bupivacaine in a multivesicular liposome carrier at the surgical site and is marketed in the United States by Pacira Pharmaceuticals, Inc. Physicians report that EXPAREL typically provides postsurgical analgesia for only 24 to 36 hours in practice, and market research we conducted suggests that physicians desire longer duration of effect to better manage local post-operative pain. In addition, because the interactions between the liposomal formulation of EXPAREL and co-administered local anesthetics can result in rapid release of bupivacaine, co-administration of other local anesthetics is inadvisable.

Potential Benefits of Our Approach

Using our PRINT technology, we have developed a particle formulation of bupivacaine that, if approved for marketing, will be used to manage local post-operative pain. We engineered the size and composition of LIQ865 particles to slowly release bupivacaine with the goal of providing patients with local pain relief for three to five days through a single administration, which we believe would provide significantly longer post-operative pain relief compared to currently marketed formulations of bupivacaine. The figure below depicts LIQ865, showing size consistency among particles.



LIQ865 is administered as a suspension and is easily injected at the surgical site. Because the molded drug particles are highly stable, we believe the potential for dose dumping, the unintended rapid drug release of bupivacaine from the carrier, would be minimized with LIQ865. In a non-clinical study, co-administration of LIQ865 with lidocaine did not cause early release of bupivacaine or otherwise negatively affect the pharmacokinetic profile of LIQ865. LIQ865 was engineered to be rapidly reconstituted and administered by injection. Unlike other sustained-release formulations, we do not expect LIQ865 will be constrained by a specific ratio of drug to diluting agent so its reconstitution volume can be adjusted based on the volume needs of a particular procedure. Furthermore, because particle-to-particle uniformity in size and composition is key to determining drug release rates, the particle-to-particle and batch-to-batch uniformity of our LIQ865 particles creates consistent release rates.

Results of Non-Clinical Studies

We commissioned an animal efficacy study of two formulations of LIQ865 in a rat perineural sciatic model, which was completed in January 2016. LIQ865 showed an extended pharmacokinetic profile and duration of nerve sensory block and the potential for extended post-operative pain management. Additionally, we evaluated the safety and tolerability of LIQ865 in a rat toxicology study in 2016. The results of this study supported advancing LIQ865 to human clinical trials.

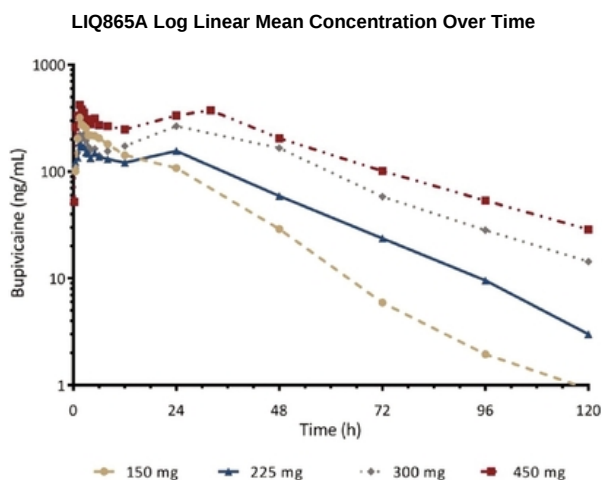
Clinical Development

In March 2017, we completed our first Phase 1 trial in Denmark to evaluate the safety and tolerability profile of two different PRINT formulations of bupivacaine: LIQ865A, consisting of particles combining bupivacaine and polylactic-glycolic acid, a polymer widely used in sustained-release drug products and surgical sutures; and LIQ865B, consisting of particles of bupivacaine alone, in a proprietary diluting agent. We observed a dose-response relationship in this trial, and all doses were well-tolerated. The results from this initial Phase 1 trial helped inform our selection of LIQ865A for further investigation in the United States. We filed an IND application in the United States in June 2017 and initiated a Phase 1 trial in the United States in September 2017 using an experimental pain model in healthy adults with quantitative sensory testing. We expect to initiate Phase 2-enabling toxicology studies in the second half of 2018. In the United States, we plan to rely in part on the 505(b)(2) regulatory pathway for our NDA submission to the FDA for LIQ865, which would allow us to rely on the FDA's prior determinations of safety and efficacy for other products containing bupivacaine, such as Marcaine and EXPAREL.

Results of Phase 1 Trials

Our first Phase 1 trial was a randomized, double-blind, controlled, single ascending dose, safety, pharmacokinetic and pharmacodynamic trial of LIQ865A and LIQ865B in 28 healthy male volunteers at a single site in Copenhagen, Denmark. The study design included dosing multiple cohorts, or groups, each receiving increasing bupivacaine doses as either LIQ865A or LIQ865B: 150 mg, 225 mg, 300 mg, 450 mg or 600 mg. The LIQ865 formulation was injected into the upper calf in one leg, and the other leg received the diluting agent without LIQ865 particles. The primary objective of this Phase 1 clinical trial was to evaluate the safety and tolerability profile of the two formulations of LIQ865. We also assessed bupivacaine pharmacokinetic and pharmacodynamic responses.

Based on the results of this Phase 1 trial, we selected the LIQ865A formulation for further development, and all of our references to LIQ865 are to this formulation. Results for 15 volunteers who received LIQ865A in this Phase 1 trial are shown below. The graph shows the mean plasma concentration of bupivacaine over 120 hours comparing the 150 mg, 225 mg, 300 mg and 450 mg dose cohorts of LIQ865A formulation, expressed on a logarithmic, or log, scale.



A dose-response relationship was observed, with the plasma levels increasing as the dosage level of LIQ865 increased. Doses of LIQ865 up to 600 mg of bupivacaine were well-tolerated in the trial. All adverse events were mild to moderate in severity, and most adverse events were limited locally at the site of injection, with most related to sensory block of underlying sensory branches of the saphenous nerve in the leg.

At the 450 mg dose of LIQ865, all subjects had maximum concentration values below 800 ng/mL, which is well below the reported thresholds for neurotoxicity and cardiac toxicity of 2000 and 4000 ng/mL, respectively. The pharmacokinetic and pharmacodynamic profile for this dose suggested a sustained duration of effect, with nearly all subjects receiving this dose reporting at least three days of sensory blunting in response to quantitative sensory testing. LIQ865 also showed rapid onset of action at the one-hour time point in all subjects, even at the lowest dose of 150 mg. Additionally, we observed a sensory block of distal sensory branches of the saphenous nerve below the knee in eight of nine subjects who received 450 mg doses of LIQ865. This sensory block lasted at least three days, which we believe further supports the duration profile of LIQ865.

In March 2017, we met with the FDA at a pre-IND meeting and verified that the current Chemical Manufacturing and Control, or CMC, and preclinical package were "phase-appropriate" and sufficient to support our initial U.S. Phase 1 trial.

Following our submission of the IND for LIQ865, we initiated our U.S. Phase 1 trial in September 2017. This trial is using an experimental pain model in healthy male and female subjects with quantitative sensory testing after an injection of LIQ865 at doses of 150 mg, 300 mg and 450 mg. The experimental pain model is designed to simulate post-operative pain for up to five days through a combination of localized ultraviolet B burn and mini-incision. Additionally, the trial includes a cross-over design to compare LIQ865 to EXPAREL.

Plans for Phase 2 Development

At our pre-IND meeting in March 2017, the FDA requested two additional toxicology studies prior to the initiation of Phase 2 trials. Accordingly, in the second half of 2018, we plan to conduct a bone fracture healing study in rats and a hernia repair study in mini-pigs. If the FDA finds these studies sufficient to support proceeding with our clinical development plan, upon successful completion, we plan to initiate Phase 2 trials subject to the availability of sufficient funding, or a partner in the event we elect to license LIQ865 to a third party. The Phase 2 trials are currently planned as ascending dose, active comparator studies in bone and soft tissue models designed to identify the minimum and optimal effective dose of LIQ865 to achieve three or more days of pain relief. We expect that this dose would be carried forward into Phase 3 development.

Competition

The primary competitor for LIQ865, if approved, would be liposomal bupivacaine, marketed as EXPAREL by Pacira Pharmaceuticals, Inc. We are aware of other long-acting local anesthetic products in clinical development from DURECT Corporation, Innocoll Holdings plc and Heron Therapeutics, Inc. as well as generic equivalents of EXPAREL, which may enter the market following the expiry of EXPAREL's patent in 2018. In addition to long-acting local anesthetics, there are a number of indirect competitors in development, including clinical-stage opioids and development-stage molecules that pursue the treatment of pain through alternative pathways.

Our PRINT Technology

Both LIQ861 and LIQ865 are being developed using our proprietary PRINT particle engineering technology, which allows us to engineer and manufacture highly uniform drug particles with independent control over the size, three-dimensional geometric shape and chemical composition of the particles. By controlling these physical and chemical parameters of particles, PRINT enables us to engineer desirable pharmacological benefits into product candidates, including prolonged duration of drug release, increased drug loading, more convenient routes of administration, the ability to create novel combination products, enhanced storage and stability and the potential to reduce adverse side effects. Controlling three-dimensional geometric shape and chemical composition of drug particles enables us to research, identify and pursue the improvement of existing therapies and creation of new therapies from existing drugs or new chemical entities, including small molecules and biologics.

Our ability to design and control these features of drug particles has the potential to provide significant benefits across the breadth of pharmaceutical applications. Product characteristics and features can be tuned depending on the need of a particular application, drug substance, delivery route and other such considerations. Based on our research to date, we anticipate the ability to: (i) enhance inhaled delivery through the highly uniform geometric shape of each drug particle; (ii) design desired drug release profiles ranging from minutes post-delivery to days, weeks or months depending on need of a target therapy, by controlling the chemical composition of the drug particles and the surface area-to-volume ratio of the particles; (iii) enable combination products where one or more of the chemical constituents can destabilize or interact by encapsulating the desired constituent in a particle to shield it from another constituent during

packaging and storage; and (iv) enhance the deposition and retention of topically delivered products by designing particles with a desired charge and/or Young's modulus.

Besides using our PRINT technology to develop our two product candidates, LIQ861 and LIQ865, we have exclusively licensed our PRINT technology to (i) GSK, a market leader in respiratory therapies, for applications broadly across inhaled delivery of their small molecule and biologic chemical entities, although we retained the ability to develop LIQ861; (ii) Aerie Pharmaceuticals, Inc., which acquired most of the assets of Envisia Therapeutics, Inc. in 2017, for broad usage in the design and commercialization of small molecule and biologic ophthalmic therapies; and (iii) G&W Laboratories, Inc., or G&W Labs, for relating to certain generic molecules to treat topical skin conditions.

Our molding approach, which we branded as "PRINT" or Particle Replication In Non-wetting Templates, combines the precision of the semi-conductor industry with the high throughput of roll-to-roll manufacturing to make highly uniform micro- and nano-particles at a commercially viable scale. Our manufacturing equipment and materials used in the production of our drug particles are proprietary and protected by our patent portfolio and trade secret know-how. Our PRINT equipment is also modular, scalable and cost-effective.

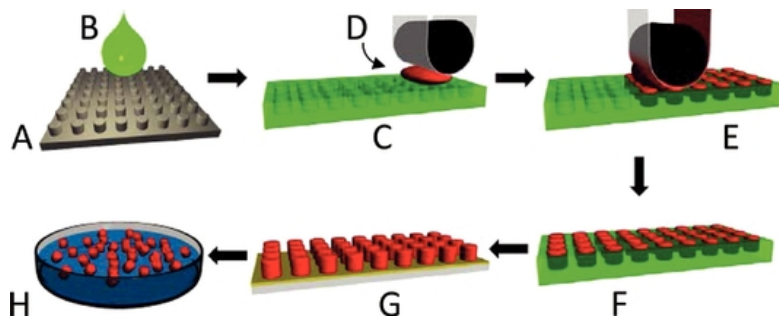
Our PRINT Process

We begin our particle design by procuring a custom designed master template etched with three-dimensional structures, or posts, that will become the eventual shape and size of our drug particles. These three-dimensional structures are then replicated in negative form, through our proprietary processing into flexible rolls of polymeric PRINT molds. Our PRINT molds consist of thousands of linear feet of thin flexible molds up to twenty-four inches wide. We then design and formulate our desired drug particle composition and apply that to our PRINT molds in our high-throughput roll-to-roll processing equipment, with each particle mimicking the shape of the mold cavity from which it was molded, thus taking the shape of the original master template structures.

The general components and steps of our PRINT molding are as follows:

- § Etch a master template with the three-dimensional geometric structures of the desired particle size and shape (step A in the diagram below);
- § Apply our proprietary polymeric mold material over the master template (step B) and cure the polymeric material to form our PRINT molds with discrete molding cavities that replicate the structures of the master template (step C);
- § Design the chemical composition of the drug particle of interest (step D);
- § Apply the drug particle composition to the cavities in the mold to fill the cavities (step E);
- § Form the drug particles in the cavities of the mold that mimic the size and shape of the mold cavities (step F);
- § Remove the drug particles from the mold cavities on a harvesting film (step G); and
- § Remove the particles from the harvesting film for further functionalization, purification or packaging to be included in the final drug particle product (step H).

The diagram below shows the general steps involved in producing drug particles using our PRINT technology:



We have translated the PRINT process into a continuous, roll-to-roll manufacturing process that we believe is compliant with cGMP and scaled to support clinical and commercial production, when required. One of our current manufacturing lines is shown below:



Manufacturing and Supply

Our facilities occupy approximately 41,000 square feet and are located in Morrisville, North Carolina. Within these premises, there are office space, research and development laboratories and equipment, analytical development and quality control laboratories, research, development and mold production facilities, research and development particle fabrication equipment, including two operational PRINT particle fabrication lines, both of which we believe are cGMP-compliant, as well as appropriate staging, storage and stability facilities. These two operational PRINT particle fabrication lines are located within class ISO7 clean rooms that operate under applicable ISO and cGMP air quality and environmental requirements.

We currently produce in this facility the product candidates for our and our collaborators' preclinical studies and clinical trials. Our current operational PRINT particle fabrication lines are scaled and capable of producing the necessary materials to support our ongoing operations and planned studies and clinical trials and, we believe, ultimately commercial scale manufacturing. The production capacity for each PRINT particle fabrication line within our production facility varies depending on the drug particle that is being produced.

We have expanded our production facility by installing an additional PRINT particle fabrication line, which was completed in March 2018 and is intended to further increase our production capacity and capability in anticipation of the commercial production of LIQ861 and LIQ865, if and when we receive marketing approval for them. The capital expenditures for leasehold improvements in our facility related to this additional fabrication line will be financed through reimbursement allowances provided by the landlord.

If and when we receive marketing approval for our product candidates, we may, from time to time, rely on third-party CMOs to produce, package and distribute some or all of our approved drug products on a commercial scale.

We also depend on third-party suppliers for clinical supplies, including active pharmaceutical ingredients which are used in our product candidates. For example, we currently rely on a sole supplier, LGM Pharma, for treprostinil, the active pharmaceutical ingredient of LIQ861, and we currently rely on a sole supplier, Plastiape, for RS00 Model 8 DPI, the DPI used to administer LIQ861.

Our Collaboration and Licensing Agreements

In addition to advancing our own product candidates, we have collaborated with leading pharmaceutical companies to develop their own product candidates across a wide range of therapeutic areas, molecule types and routes of administration, leveraging our PRINT technology. These collaborations are intended to help advance new PRINT capabilities and build upon our competitive advantage in the pharmaceutical industry, while adding to our intellectual property portfolio.

GlaxoSmithKline

We have actively collaborated with GSK on the use of our PRINT technology in respiratory disease. In June 2012, we entered into an Inhaled Collaboration and Option Agreement, or the GSK ICO Agreement, with GSK to collaborate on research regarding the application of our PRINT technology to specified inhaled therapies. Pursuant to the GSK ICO Agreement, we granted GSK exclusive options and licenses to further develop and commercialize such inhaled therapies using our PRINT technology. In partial consideration of the rights granted to GSK under the GSK ICO Agreement, we received a one-time up-front payment of \$4.0 million. We also entered into a stock purchase agreement with GSK pursuant to which GSK purchased 4,765,248 shares of our Series C-1 convertible preferred stock for an aggregate of \$3.8 million. In September 2015, GSK exercised its option to obtain an exclusive, worldwide license to certain of our know-how and patents relating to our PRINT technology, for the purpose of, among others, preclinical studies of inhaled therapeutics developed, manufactured or otherwise produced using our PRINT technology. In connection with the grant of this license, we received a one-time option exercise fee of \$15.0 million. Under the terms of the GSK ICO Agreement, we are also entitled to continued research and development funding, certain milestone payments aggregating up to \$158 million upon the achievement of specified milestone events, as well as tiered royalties on the worldwide sales of the licensed products at percentages in the mid-single digits. In February 2016, we received a \$3.0 million payment from GSK upon the achievement of a clinical development milestone.

GSK has the right to terminate the GSK ICO Agreement in its entirety or on a product-by-product basis upon a specified period of prior written notice. Upon termination of the GSK ICO Agreement, each party will continue to have the right to practice and/or license its interest in any know-how developed during the collaboration without seeking the consent of, or accounting to, the other party.

As of March 9, 2018, GSK is conducting a Phase 1 trial of an inhaled chronic obstructive pulmonary disease, or COPD, candidate that is formulated as an inhaled, dry powder using the PRINT technology. Through this collaboration, we have worked, and anticipate continuing to work, together with GSK to advance inhaled therapeutic products into clinical studies.

G&W Labs

In June 2016, we entered into a development and license agreement, or the G&W Labs Agreement, with G&W Labs to collaborate on research regarding the application of our PRINT technology to topical treatments for dermatological conditions. Pursuant to the terms of the G&W Labs Agreement, we licensed our PRINT technology to G&W Labs for the research, development and commercialization of specified formulated compounds and licensed products, for administration to the skin for treatment or prophylaxis of skin diseases, or skin symptoms of non-skin diseases, disorders and conditions in humans, or in suppository form for the treatment of mucosa in humans. The G&W Labs Agreement includes an option to extend the license of our PRINT technology to several other products in the same field. Under the terms of this G&W Labs Agreement, we received a one-time up-front payment of \$1.0 million, and we are entitled to receive milestone payments aggregating up to \$21.5 million upon the achievement of specified milestone events and royalties on net sales of commercialized products at a high single digit percentage.

G&W Labs has the right to terminate the G&W Labs Agreement in its entirety or on a select compound-by-compound and country-by-country basis upon a specified period of prior written notice. Upon termination of the G&W Labs Agreement in its entirety, all rights and licenses will immediately terminate. Upon termination with respect to a select compound or territory, all rights and licenses granted to G&W Labs will immediately terminate with respect to the select terminated compound or territory and G&W Labs will grant us a license to operate freely with respect to the select terminated product or territory.

The University of North Carolina at Chapel Hill

In December 2008, we entered into the Amended and Restated License Agreement with UNC for the use of certain patent rights and technology relating to initial innovations of our PRINT technology, or the UNC License. Under the terms of the UNC License, we have an exclusive license to such patent rights and technology for our drug products. The UNC License grants us the right to grant sublicenses to the technology as well as control the litigation of any infringement claim instituted by or against us in respect of the licensed patent rights. We are also responsible for the costs of all expenses associated with the prosecution and maintenance of the patents and patent applications. Such filings and prosecution will be carried out by UNC and in UNC's name but under our control.

Under the UNC License, we are required to pay UNC royalties equal to a low single digit percentage of all net sales of our drug products whose manufacture, use or sale includes any use of the technology or patent rights covered by the UNC License, as well as tiered royalty percentages ranging in the low single digits of sales by our sublicensees for any product covered by rights under a sublicense agreement granted pursuant to the UNC License. Under the UNC License, we are also required to pay UNC 20% of all fees other than royalties that we collect and are attributable to UNC sublicensed intellectual property. As consideration for the UNC License, we paid UNC a license issue fee in the form of 196,469 shares of our Class B non-voting common stock in 2004. During the term of the UNC License, we have also paid approximately \$2.9 million in the aggregate to UNC pursuant to a Supported Research Agreement, or the SRA. In connection therewith, we may exclusively license resulting inventions under the SRA for a \$5,000 up-front license fee per invention. We have also paid aggregate consideration of \$5.7 million in sublicense fees to UNC pursuant to the UNC License, for our sublicenses of our PRINT technology to GSK and G&W Labs, as described above. We also reimburse UNC for its costs of procuring and maintaining the patents we license from UNC. Such reimbursements amounted to \$180,943 for the year ended December 31, 2016. Effective November 2017, we have satisfied all milestones associated with our UNC License. The UNC License expires (i) on the expiration of the last to expire patent included in the patent rights or (ii) if no patents mature from such patent rights, in December 2028.

We have the right to terminate the UNC License upon a specified period of prior written notice. UNC may terminate the UNC License in certain circumstances, including if we fail to pay royalty or other payments on time, if we fail to meet the remaining milestone related to the commercial sale of a PRINT product by December 31, 2020 or if we fail to sublicense in accordance with the terms of the UNC License. Upon termination of the UNC License, we must pay any royalty obligations due upon termination.

Intellectual Property

The proprietary nature and protection of our product candidates, their methods of use and our platform technology that enables our product candidates are an important part of our business strategy of rapidly developing and commercializing new medicines that address areas of significant unmet medical needs.

Our policy is to seek patent protection of our proprietary product candidates and technology by filing U.S., international and certain foreign patent applications covering certain of our proprietary technology, inventions, improvements and product candidates that are important to the growth and protection of our business. We also rely on trade secrets to protect aspects of our business that are not amenable to patent protection or where we do not consider patent protection to be adequate or applicable.

Our success depends, in part, on our ability to obtain and maintain patent and other protection for our product candidates, enabling technology, inventions and know-how and our ability to defend and enforce these patents, preserve the proprietary nature of our trade secrets and operate our business without infringing valid and enforceable patent and other proprietary rights of third parties. We pursue both composition-of-matter patents and method-of-use patents for our product candidates. We are also pursuing patents covering our proprietary PRINT micro- and nano-particle fabrication technology.

The term of individual patents depends upon 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 filing date of a non-provisional patent application to which the patent claims priority in the applicable country. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, or PTA, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office, or the USPTO, in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over a commonly owned patent or a patent naming a common inventor and having an earlier expiration date. The Patent Term Restoration Act of 1984, as amended, or the Hatch-Waxman Act, permits a patent term extension, or PTE, of up to five years beyond the expiration date of a U.S. patent as partial compensation for the length of time the drug is under regulatory review while the patent is in force. A PTE cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only one patent applicable to each regulatory review period may be extended. Further, only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended and the extension only applies to the approved drug, method for using it or method for manufacturing it for which the extension was obtained. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug.

We are the owner or exclusive licensee of patents and applications relating to our proprietary technology platform and our product candidates, and are pursuing additional patent protection for these and for our other product candidates and technology developments.

We have a total of 126 patents and pending patent applications in our patent portfolio. As of March 9, 2018, we were the sole owner of 14 patents in the United States and 19 patents in foreign jurisdictions, as well as approximately 22 additional pending patent applications, including provisional patent applications, in the United States, Europe, Japan and other jurisdictions. In addition to the patents and patent applications owned solely by us, our patent portfolio also includes 48 patents and 23 patent applications licensed from third parties. As of March 9, 2018, we had an exclusive, worldwide license from UNC to 16 U.S. patents and 31 foreign patents, as well as 20 additional patent applications in the United States or selected foreign jurisdictions. Eight of the patents and two of the patent applications in the portfolio licensed from UNC are jointly owned by us.

With regard to our LIQ861 product candidate, as of March 9, 2018 our owned or in-licensed patents and patent applications that are directed to aspects of the PRINT technology utilized in LIQ861 include:

- § U.S. Patent No. 8,263,129, which includes claims directed to methods of forming substantially uniform particles and is expected to expire on January 14, 2029, including 1486 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 8,420,124, which includes claims directed to a plurality of monodisperse particles and is expected to expire on August 19, 2028, including 1338 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 9,877,920, which includes claims directed to a plurality of particles and is expected to expire on December 20, 2024, assuming payment of all maintenance fees;
- § U.S. Patent No. 8,439,666, which includes claims directed to laminate molds and is expected to expire on December 4, 2026, assuming payment of all maintenance fees;
- § U.S. Patent No. 8,662,878, which includes claims directed to molds and mold systems and is expected to expire on December 4, 2026, assuming payment of all maintenance fees;
- § U.S. Patent Nos. 8,945,441 and 9,662,809, which include claims directed to methods of making laminate molds and are each expected to expire on December 4, 2026, assuming payment of all maintenance fees;
- § U.S. Patent No. 7,976,759, which includes claims directed to methods of forming nanoparticles and is expected to expire on October 13, 2028, assuming payment of all maintenance fees;
- § U.S. Patent No. 9,545,737, which includes claims directed to methods of forming pharmaceutical particles and is expected to expire on April 22, 2029, including 191 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 8,444,907, which includes claims directed to methods for fabricating a substantially seamless pattern and is expected to expire on June 28, 2031, including 572 days of PTA and assuming payment of all maintenance fees; and
- § U.S. Patent No. 9,744,715, which includes claims directed to methods for fabricating a substantially seamless pattern and is expected to expire on December 3, 2029, assuming payment of all maintenance fees.

As of March 9, 2018, we were sole owner of one pending international patent application, PCT/US17/31301, specifically directed to our LIQ861 product candidate. PCT/US17/31301 includes claims directed to dry powder inhalation compositions, methods of using such compositions treating a patient with PAH and methods of making such compositions. Any patents that may issue from PCT/US17/31301 are expected to expire on May 5, 2037, absent any terminal disclaimers, patent term adjustments or extensions and assuming payment of all maintenance fees.

With regard to our LIQ865 product candidate, as of March 9, 2018, our owned or in-licensed patents and patent applications that cover aspects of the PRINT technology utilized in LIQ865 include:

- § U.S. Patent No. 8,263,129, which includes claims directed to methods of forming substantially uniform particles and is expected to expire on January 14, 2029, including 1,486 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 8,420,124, which includes claims directed to a plurality of monodisperse particles and is expected to expire on August 19, 2028, including 1,338 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 9,877,920, which includes claims directed to a plurality of particles and is expected to expire on December 20, 2024, assuming payment of all maintenance fees;
- § U.S. Patent No. 8,662,878, which includes claims directed to molds and mold systems and is expected to expire on December 4, 2026, assuming payment of all maintenance fees;

- § U.S. Patent Nos. 8,945,441 and 9,662,809, which include claims directed to methods of making laminate molds and are each expected to expire on December 4, 2026, assuming payment of all maintenance fees;
- § U.S. Patent No. 7,976,759, which includes claims directed to methods of forming nanoparticles and is expected to expire on October 13, 2028, assuming payment of all maintenance fees;
- § U.S. Patent No. 9,545,737, which includes claims directed to methods of forming pharmaceutical particles and is expected to expire on April 22, 2029, including 191 days of PTA and assuming payment of all maintenance fees;
- § U.S. Patent No. 8,444,907, which includes claims directed to methods for fabricating a substantially seamless pattern and is expected to expire on June 28, 2031, including 572 days of PTA and assuming payment of all maintenance fees; and
- § U.S. Patent No. 9,744,715, which includes claims directed to methods for fabricating a substantially seamless pattern and is expected to expire on December 3, 2029, assuming payment of all maintenance fees.

As of March 9, 2018, we were sole owner of one pending international patent application, PCT/US17/31397, specifically directed to our LIQ865 product candidate. PCT/US17/31397 includes claims directed to particulate compositions comprising an amino amide anesthetic and Poly(lactide-co-glycolide) polymer, formulations comprising such compositions, methods of using such compositions for inducing extended analgesia and methods of forming such compositions. Any patents that may issue PCT/US17/31397 are expected to expire on May 5, 2037, absent any patent term adjustments or extensions and assuming payment of all maintenance fees.

Sales and Marketing

We have retained worldwide commercial rights for our internal product candidates. If our product candidates receive marketing approval, we plan to commercialize them in the United States by building and utilizing our own commercial infrastructure. Outside of the United States, we intend to pursue the regulatory approval of our product candidates in collaboration with others, while leveraging the regional expertise of a commercialization collaborator. Considering our stage of development, we have not yet established a commercial organization or distribution capabilities.

With regard to our lead product candidate, LIQ861, we intend to focus our commercial efforts initially on the U.S. market, which we believe represents the largest market opportunity. In addition, we plan to establish collaborations with established pharmaceutical companies to commercialize our products in foreign markets. Within the United States, we believe that we can effectively commercialize LIQ861, if approved, with an initial specialty sales force of up to 75 representatives. We intend to initially pursue a highly concentrated target market of PAH centers of excellence and frequent prescribers of PAH therapies. Our physician call points within these sites of care will include cardiologists, pulmonologists and their supporting staff. We expect to supplement our sales force with representatives in the medical science, nursing and reimbursement fields to support the proper training and utilization of LIQ861. As part of our commercialization strategy, we plan to educate physician specialists, healthcare practitioners, patients and caregivers of the benefits of LIQ861 and its proper use. We plan to work with national associations, such as the Pulmonary Hypertension Association, and patient advocacy groups to update treatment guidelines to include a new, convenient product with a wide range of dosing.

Competition

The pharmaceutical industry is intensely competitive, subject to rapid and significant technological change and places emphasis on the value of proprietary products. While we believe that our technologies and experience provide us with a competitive advantage, our competitors include organizations such as major multinational pharmaceutical companies, established biotechnology companies, biopharmaceutical companies and generic drug companies. Many of our competitors have greater financial and other resources

than we have, such as more commercial resources, larger research and development staffs and more extensive marketing and manufacturing organizations. As a result, these companies may obtain marketing approval more rapidly than we are able and may be more effective in selling and marketing their products. Smaller or early stage companies may also prove to be significant competitors, particularly through collaboration arrangements with large, established companies.

Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. Our competitors may succeed in developing, acquiring or licensing, on an exclusive basis, technologies and drug products that are more effective or less costly than products that we are currently selling through collaborators or developing or that we may develop, which could render our products obsolete and non-competitive. We expect any products that we develop and commercialize to compete on the basis of, among other things, efficacy, safety, convenience of administration and delivery, price and the availability of reimbursement from government and other third-party payors. We also expect to face competition in our efforts in recruiting and retaining qualified personnel and establishing clinical trial sites, patient enrollment in clinical trials and in identifying appropriate collaborators to help commercialize any approved products in our target commercial markets.

Government Regulation

Government Regulation and Product Approval

Government authorities in the United States at the federal, state and local level and in other countries, extensively regulate, among other things, the research, development, testing, manufacture, (including manufacturing changes), quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing, export and import of products such as those we are developing. The processes for obtaining regulatory approvals in the United States and in foreign countries, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources.

U.S. Drug Development Process

In the United States, the FDA regulates drugs under the United States Federal Food, Drug, and Cosmetic Act, or the FDCA, and the FDA's implementing regulations.

Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- § completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices regulations;
- § submission to the FDA of an IND, which must become effective before human clinical studies may begin;
- § approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- § performance of adequate and well-controlled human clinical studies according to Good Clinical Practice, or GCP, regulations, to establish the safety and efficacy of the proposed drug for its intended use;
- § preparation and submission to the FDA of an NDA, containing the results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the drug product, proposed labeling and other relevant information, to request approval to market the drug product;

- § satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug product, or components thereof, are produced to assess compliance with cGMP to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- § satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of clinical data;
- § FDA review and approval of the NDA;
- § payment of fees, including annual program fees for each drug product on the market; and
- § ongoing compliance with any post-approval requirements, including risk evaluation and mitigation strategy, or REMS, and post-approval studies required by the FDA.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all.

Once a pharmaceutical product candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity, formulation and stability, as well as animal studies. When a sponsor wants to proceed to test the product candidate in humans, it must submit an IND in order to conduct clinical trials.

An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, to the FDA as part of the IND. The sponsor must also include a protocol detailing, among other things, the objectives of the initial clinical study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the initial clinical study lends itself to an efficacy evaluation. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions related to a proposed clinical study and places the study on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical study can begin. Clinical holds also may be imposed by the FDA at any time before or during clinical studies due to safety concerns or non-compliance, and may be imposed on all product candidates within a certain pharmaceutical class. The FDA also can impose partial clinical holds, for example, prohibiting the initiation of clinical studies of a certain duration or for a certain dose.

All clinical studies must be conducted under the supervision of one or more qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent in writing before their participation in any clinical study. Further, an IRB must review and approve the plan for any clinical study before it commences at any institution, and the IRB must conduct continuing review and reapprove the study at least annually. An IRB considers, among other things, whether the risks to individuals participating in the clinical study are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the clinical study and the consent form that must be provided to each clinical study subject or his or her legal representative and must monitor the clinical study until completed.

Each new clinical protocol and any amendments to the protocol must be submitted for FDA review, and to the IRBs for approval. Protocols detail, among other things, the objectives of the clinical study, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their ClinicalTrials.gov website.

Human clinical studies are typically conducted in three sequential phases that may overlap or be combined:

- § *Phase 1.* The product is initially introduced into a small number of healthy human subjects or patients and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion

and, if possible, to gain early evidence on effectiveness. In the case of some products for severe or life-threatening diseases, especially when the product is suspected or known to be unavoidably toxic, the initial human testing may be conducted in patients.

§ *Phase 2.* Involves clinical studies in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage and schedule.

§ *Phase 3.* Clinical studies are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical study sites. These clinical studies are intended to establish the overall risk/benefit relationship of the product and provide an adequate basis for product labeling.

Progress reports detailing the results of the clinical studies must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events. Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical study at its institution if the clinical study is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

Concurrent with clinical studies, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the product and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

Assuming successful completion of the required clinical testing, the results of product development, preclinical studies and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the drug, proposed labeling and other relevant information, are submitted to the FDA as part of an NDA for a new drug, requesting approval to market the product.

The submission of an NDA is subject to the payment of a substantial application user fee although a waiver of such fee may be obtained under certain limited circumstances. For example, the agency will waive the application fee for the first human drug application that a small business or its affiliate submits for review. The sponsor of an approved NDA is also subject to annual program user fees.

In addition, under the Pediatric Research Equity Act of 2003, or PREA, an NDA application (or a supplement to an application) for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration must contain data that are adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective, unless the applicant has obtained a waiver or deferral.

A sponsor who is planning to submit a marketing application for a drug product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration must submit an initial Pediatric Study Plan, or PSP, within 60 days of an End-of-Phase 2 meeting or as may be agreed between the sponsor and the FDA. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any

request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of data or full or partial waivers. The FDA and the sponsor must reach agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical studies or other clinical development program.

The FDA also may require submission of a REMS to mitigate any identified or suspected serious risks. The REMS could include medication guides, physician communication plans, assessment plans and elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools.

The FDA reviews all NDAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept an application for filing. In this event, the application must be re-submitted with the additional information. The re-submitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review.

The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant.

The FDA may approve an NDA only if the methods used in, and the facilities and controls used for, the manufacture processing, packing and testing of the product are adequate to ensure and preserve its identity, strength, quality and purity.

Before approving an NDA, the FDA often will inspect the facility or facilities where the product is or will be manufactured.

The FDA may refer the NDA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. An advisory committee is a panel of experts, including clinicians and other scientific experts, who provide advice and recommendations when requested by the FDA. The FDA is not bound by the recommendation of an advisory committee, but it considers such recommendations when making decisions.

Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure clinical data supporting the submission were developed in compliance with GCP.

The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied, or may require additional clinical data or other data and information. Even if such data and information are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical studies are not always conclusive and the FDA may interpret data differently than an applicant interprets the same data.

After the FDA's evaluation of an application, the FDA may issue an approval letter or a complete response letter to indicate that the review cycle is complete and that the application is not ready for approval. A complete response letter generally contains a statement of specific conditions that must be met to secure final approval of the application and may require additional clinical or preclinical testing for the FDA to reconsider the application. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical studies. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the application, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing.

Even with submission of additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's

satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require post-approval studies, including Phase 4 clinical studies, to further assess safety and effectiveness after approval and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

New Drug Applications

Most drug products obtain FDA marketing approval pursuant to an NDA (described above) for innovator products, or an abbreviated new drug application, or ANDA, for generic products. Relevant to ANDAs, the Hatch-Waxman Act amendments to the FDCA established a statutory procedure for submission and FDA review and approval of ANDAs for generic versions of branded drugs previously approved by the FDA (such previously approved drugs are also referred to as listed drugs). Because the safety and efficacy of listed drugs have already been established by the brand company (sometimes referred to as the innovator), the FDA does not require a demonstration of safety and efficacy of generic products. However, a generic manufacturer is typically required to conduct bioequivalence studies of its test product against the listed drug. The bioequivalence studies for orally administered, systemically available drug products assess the rate and extent to which the active pharmaceutical ingredient is absorbed into the bloodstream from the drug product and becomes available at the site of action. Bioequivalence is established when there is an absence of a significant difference in the rate and extent for absorption of the generic product and the listed drug. For some drugs, including locally acting drugs such as topical anti-fungals, other means of demonstrating bioequivalence may be required by the FDA, especially where rate and/or extent of absorption are difficult or impossible to measure. In addition to the bioequivalence data, an ANDA must contain patent certifications and chemistry, manufacturing, labeling and stability data.

A third alternative is a special type of NDA, commonly referred to as a 505(b)(2) NDA, enables the applicant to rely, in part, on the FDA's findings of safety and efficacy of an existing product, or published literature, in support of its application. 505(b)(2) NDAs often provide an alternate path to FDA approval for new or improved formulations or new uses of previously approved products. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. The applicant may rely upon the FDA's findings with respect to certain preclinical or clinical studies conducted for an approved product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new product candidate for all or some of the label indications for which the referenced product has been approved, as well as for any new indication sought by the 505(b)(2) applicant.

In seeking approval for a drug through an NDA, including a 505(b)(2) NDA, applicants are required to list with the FDA certain patents of the applicant or that are held by third parties whose claims cover the applicant's product. Upon approval of an NDA, each of the patents listed in the application for the drug is then published in the Orange Book. Any subsequent applicant who files an ANDA seeking approval of a generic equivalent version of a drug listed in the Orange Book or a 505(b)(2) NDA referencing a drug listed in the Orange Book must make one of the following certifications to the FDA concerning patents: (1) the patent information concerning the reference listed drug product has not been submitted to the FDA; (2) any such patent that was filed has expired; (3) the date on which such patent will expire; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. This last certification is known as a paragraph IV certification. A notice of the

paragraph IV certification must be provided to each owner of the patent that is the subject of the certification and to the holder of the approved NDA to which the ANDA or 505(b)(2) application refers. The applicant may also elect to submit a "section viii" statement certifying that its proposed label does not contain (or carves out) any language regarding the patented method-of-use rather than certify to a listed method-of-use patent.

If the reference NDA holder or patent owners assert a patent challenge directed to one of the Orange Book listed patents within 45 days of the receipt of the paragraph IV certification notice, the FDA is prohibited from approving the application until the earlier of 30 months from the receipt of the paragraph IV certification expiration of the patent, settlement of the lawsuit or a decision in the infringement case that is favorable to the applicant. The ANDA or 505(b)(2) application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the branded reference drug has expired as described in further detail below. Thus approval of a 505(b)(2) NDA or ANDA can be stalled until all the listed patents claiming the referenced product have expired, until any non-patent exclusivity, such as exclusivity for obtaining approval of a new chemical entity, listed in the Orange Book for the referenced product has expired, and, in the case of a Paragraph IV certification and subsequent patent infringement suit, until the earlier of 30 months, settlement of the lawsuit or a decision in the infringement case that is favorable to the ANDA or 505(b)(2) applicant.

Combination Products

Medical products containing a combination of new drugs, biological products, or medical devices are regulated as "combination products" in the United States. A combination product generally is defined as a product comprised of components from two or more regulatory categories, such as drug/device, device/biologic or drug/biologic. The term combination product includes: (i) a product comprised of two or more regulated components (i.e., drug/device, biologic/device, drug/biologic or drug/device/biologic, that are physically, chemically or otherwise combined or mixed and produced as a single entity); (ii) two or more separate products packaged together in a single package or as a unit and comprised of drug and device products, device and biological products or biological and drug products; (iii) a drug, device or biological product packaged separately that according to its investigational plan or proposed labeling is intended for use only with an approved individually specified drug, device or biological product where both are required to achieve the intended use, indication or effect and where upon approval of the proposed product the labeling of the approved product would need to be changed, such as to reflect a change in intended use, dosage form, strength, route of administration, or significant change in dose; or (iv) any investigational drug, device or biological product packaged separately that according to its proposed labeling is for use only with another individually specified investigational drug, device, or biological product where both are required to achieve the intended use, indication or effect.

Each constituent part of a combination product is subject to the requirements established by the FDA for that type of constituent part, whether a new drug, biologic or device. In order to facilitate pre-market review of combination products, the FDA designates one of its centers to have primary jurisdiction for the pre-market review and regulation of the overall product based upon a determination by FDA of the primary mode of action of the combination product, and typically one application, such as for a drug/device combination product assigned to the FDA's Center for Drug Evaluation and Research, or CDER, an NDA, will be made.

A device with the primary purpose of delivering or aiding in the delivery of a drug and distributed containing a drug (i.e., a "prefilled delivery system") is typically evaluated by CDER using drug authorities and device authorities, as necessary.

A device with the primary purpose of delivering or aiding in the delivery of a drug and that is distributed without the drug (i.e., unfilled) is typically evaluated by the FDA's Center for Devices and Radiological Health and CDER, respectively, unless the intended use of the two products, through labeling, creates a combination product.

The FDA has indicated that dry powder inhalers, such as our lead product candidate, LIQ861, are drug/device combination products.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to extensive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping (including certain electronic record and signature requirements), periodic reporting, product sampling and distribution, advertising and promotion and reporting of certain adverse experiences, deviations and other problems with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Further, manufacturers must continue to comply with cGMP requirements, which are extensive and require considerable time, resources and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

Manufacturers and certain other entities involved in the manufacturing and distribution of approved products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. The cGMP requirements apply to all stages of the manufacturing process, including the production, processing, sterilization, packaging, labeling, storage and shipment of the product. Manufacturers must establish validated systems to ensure that products meet specifications and regulatory standards, and test each product batch or lot prior to its release. Combination products are subject to FDA regulation to ensure the quality of both the constituent parts and the finished product.

Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

The FDA may impose a number of post-approval requirements as a condition of approval of an application. For example, the FDA may require post-marketing testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

The FDA may withdraw a product approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, problems with manufacturing processes, or failure to comply with regulatory requirements, may result in restrictions on the product or even complete withdrawal of the product from the market.

Potential implications include required revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- § restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- § warning letters or holds on post-approval clinical trials;
- § refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;

- § product seizure or detention, or refusal to permit the import or export of products; or
- § injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription drugs is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of the products and product samples at the federal level, and sets minimum standards for the registration and regulation of distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

From time to time, legislation is drafted, introduced and passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition to new legislation, FDA regulations, guidance and policies are often revised or reinterpreted by the agency in ways that may significantly affect our business and our product candidates. It is impossible to predict whether further legislative or FDA regulation or policy changes will be enacted or implemented and what the impact of such changes, if any, may be.

Patent Term Restoration

Depending upon the timing, duration and specifics of FDA approval of the use of our product candidates, some of our U.S. patents may be eligible for limited PTE under the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term effectively lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA plus the time between the submission date of an NDA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension. Extensions are not granted as a matter of right and the extension must be applied for prior to expiration of the patent and within a sixty day period from the date the product is first approved for commercial marketing. The USPTO, in consultation with the FDA, reviews and approves the application for any PTE or restoration. In the future, we may apply for PTEs, defined as the length of the regulatory review of products covered by our granted patents, for some of our currently owned or licensed applications and patents to add patent life beyond their current expiration dates. Such extensions will depend on the length of the regulatory review; however, there can be no assurance that any such extension will be granted to us.

Marketing Exclusivity

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain applications. The specific scope varies, but fundamentally the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, for

new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving applications for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical studies necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of exclusivity in the United States. Pediatric exclusivity, if granted, provides an additional six months to the term of any existing regulatory exclusivity, including the non-patent exclusivity periods described above. This six-month exclusivity may be granted based on the voluntary completion of a pediatric clinical study in accordance with an FDA-issued "Written Request" for such a clinical study.

Pharmaceutical Coverage, Pricing and Reimbursement

In the United States, sales of any products for which we may receive regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payors. Third-party payors include government authorities, managed care providers, private health insurers and other organizations.

Significant uncertainty exists as to the coverage and reimbursement status of any products for which we may obtain regulatory approval. Some of the additional requirements and restrictions on coverage and reimbursement levels imposed by third-party payors influence the purchase of healthcare services and products. Third-party payors may limit coverage to specific drugs on an approved list, or formulary, which might not include all of the FDA-approved drugs for a particular indication, or place drugs at certain formulary levels that result in lower reimbursement levels. Moreover, a payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. Further, one payor's determination to provide coverage does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement may differ significantly from payor to payor as there is no uniform policy of coverage and reimbursement for drug products among third-party payors.

Reimbursement may also impact the demand for drug products that obtain marketing approval. If coverage for a drug product is obtained by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Prescribing physicians are unlikely to use or prescribe drug products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of those drug products. If reimbursement is not available, or is available only to limited levels, a drug product which has obtained marketing approval may not be successfully commercialized.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain and maintain coverage and reimbursement for any product that might be approved for sale, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of any products, in addition to the costs required to obtain regulatory approvals. Our product candidates may not be considered medically necessary or cost-effective. If third-party payors do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The U.S. government and state legislatures have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price controls,

restrictions on reimbursement and coverage and requirements for substitution of generic products for branded prescription drugs. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could exclude or limit our drugs and product candidates from coverage and limit payments for pharmaceuticals.

In addition, we expect that the increased emphasis on managed care and cost containment measures in the United States by third-party payors and government authorities to continue and will place pressure on pharmaceutical pricing and coverage. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Other Healthcare Laws and Compliance Requirements

Healthcare providers, physicians and third-party payors often play a primary role in the recommendation and prescription of any currently marketed products and product candidates for which we may obtain marketing approval. Our current and future arrangements with healthcare providers, physicians, third-party payors and customers, and our sales, marketing and educational activities, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations (at the federal and state level) that may constrain our business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval.

In addition, we may be subject to transparency laws and patient privacy regulation by both the federal government and the states in which we conduct our business. The laws that may affect our ability to operate include the following:

- § The federal Anti-Kickback Statute, which prohibits, among other things, persons and entities including pharmaceutical manufacturers from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, an item or service reimbursable, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. This statute has been interpreted broadly to apply to, among other things, arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other hand. The term "remuneration" expressly includes kickbacks, bribes or rebates and also has been broadly interpreted to include anything of value, including, for example, gifts, discounts, waivers of payment, ownership interest and providing anything at less than its fair market value. There are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution or other regulatory sanctions, however, the exceptions and safe harbors are drawn narrowly, and practices that do not fit squarely within an exception or safe harbor may be subject to scrutiny. The failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices may not meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability in all cases. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation. In addition, 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.
- § The federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which prohibits individuals or entities from, among other things, knowingly presenting, or causing to be presented, claims for payment to, or approval by, the federal government that are false, fictitious or fraudulent or knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim to avoid, decrease or conceal an obligation to pay

money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the federal government. Although we do not submit claims directly to payors, manufacturers can be held liable under these laws if they are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers, promoting a product off-label, marketing products of sub-standard quality, or, as noted above, paying a kickback that results in a claim for items or services. In addition, our activities relating to the reporting of wholesaler or estimated retail prices for our products, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state and third-party reimbursement for our products, and the sale and marketing of our products, are subject to scrutiny under this law. For example, several pharmaceutical and other healthcare companies have faced enforcement actions under these laws for allegedly inflating drug prices they report to pricing services, which in turn were used by the government to set Medicare and Medicaid reimbursement rates, and for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. The False Claims Act also permits a private individual acting as a "whistleblower" to bring actions on behalf of the federal government alleging violations of the False Claims Act and to share in any monetary recovery. In addition, federal Anti-Kickback Statute violations and certain marketing practices, including off-label promotion, may also implicate the False Claims Act. Although the False Claims Act is a civil statute, conduct that results in a False Claims Act violation may also implicate various federal criminal statutes.

- § The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, 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.
- § HIPAA, as amended by as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, including the Final Omnibus Rule published on January 25, 2013, impose, among other things, obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information held by certain healthcare providers, health plans and healthcare clearinghouses, known as covered entities, and business associates. Among other things, HITECH made certain aspects of HIPAA's rules (notably the Security Rule) directly applicable to business associates — independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also 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 court to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. The Department of Health and Human Services Office of Civil Rights, or the OCR, has increased its focus on compliance and continues to train state attorneys general for enforcement purposes. The OCR has recently increased both its efforts to audit HIPAA compliance and its level of enforcement, with one recent penalty exceeding \$5 million.
- § The federal physician payment transparency requirements, sometimes referred to as the "Physician Payments Sunshine Act," created under the U.S. Patient Protection and Affordable Health Care Act of 2010, as amended, or the ACA, and its implementing regulations, which requires applicable manufacturers of covered drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the State Children's Health Insurance Program (with certain

exceptions) to annually report to the United States Department of Health and Human Services, information related to certain payments or other transfers of value made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members.

- § According to the U.S. Federal Trade Commission, or the FTC, failing to take appropriate steps to keep consumers' personal information secure constitutes unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act, or the FTCA, 15 U.S.C § 45(a). The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Medical data is considered sensitive data that merits stronger safeguards. The FTC's guidance for appropriately securing consumers' personal information is similar to what is required by the HIPAA Security Rule.
- § Analogous state laws and regulations, such as state anti-kickback and false claims laws, which may apply to items or services reimbursed by any third-party payor, including commercial insurers, some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report pricing and marketing information, including, among other things, information related to payments to physicians and other healthcare providers or marketing expenditures, state and local laws that require the registration of pharmaceutical sales representatives, and state laws governing the privacy and security of health information and the use of prescriber-identifiable data in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under such laws, it is possible that certain business activities could be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state 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. Ensuring that business arrangements with third parties comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert management's attention from the business.

If our operations are found to be in violation of any of the health regulatory laws described above or any other laws that apply to us, we may be subject to penalties, including, but not limited to, criminal, civil and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from participation in government healthcare programs, injunctions, private qui tam actions brought by individual whistleblowers in the name of the government and the curtailment or restructuring of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, any of which could adversely affect our ability to operate our business and our results of operations.

Healthcare Reform

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States. By way of example, in March 2010, the ACA as amended was enacted, which includes measures that have or will significantly

change the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical industry are the following:

- § The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition of Medicare Part B and Medicaid coverage of the manufacturer's outpatient drugs furnished to Medicaid patients. Effective in 2010, the ACA made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs from 15.1% of average manufacturer price, or AMP, to 23.1% of AMP, establishing new methodologies by which AMP is calculated and rebates owed by manufacturers under the Medicaid Drug Rebate Program are collected for drugs that are inhaled, infused, instilled, implanted or injected, adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, expanding the universe of Medicaid utilization subject to drug rebates to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations, and expanding the population potentially eligible for Medicaid drug benefits.
- § In order for a pharmaceutical product to receive federal reimbursement under the Medicare Part B and Medicaid programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the AMP and Medicaid rebate amounts reported by the manufacturer. Effective in 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although, under the current state of the law, with the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs when used for the orphan indication. In addition, as 340B drug pricing is determined based on AMP and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase. Recent proposed guidance from the U.S. Department of Health and Human Services Health Resources and Services Administration, if adopted in its current form, may affect manufacturers' rights and liabilities in conducting audits and resolving disputes under the 340B program.
- § Expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals beginning in April 2010 and by adding new mandatory eligibility categories for certain individuals with income at or below 133.0% of the federal poverty level beginning in 2014, thereby potentially increasing both the volume of sales and manufacturers' Medicaid rebate liability.
- § The ACA imposed a requirement on manufacturers of branded drugs to provide a 50% (and 70% commencing on January 1, 2019) discount off the negotiated price of branded drugs dispensed to Medicare Part D patients in the coverage gap (i.e., the donut hole) in order for Part D coverage to be available for the manufacturer's covered Part D drugs.
- § The ACA imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs with aggregate branded prescription drug sales over \$5 million to certain government healthcare programs or pursuant to coverage under such programs, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications.
- § The ACA implemented the federal physician payment transparency requirements, sometimes referred to as the "Physician Payments Sunshine Act".
- § The ACA established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products by influencing decisions relating to coverage and reimbursement rates.

- § The ACA established the Center for Medicare and Medicaid Innovation within Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation from 2011 to 2019.
- § The ACA established a licensure framework for follow-on biologic products.
- § The ACA expanded healthcare fraud and abuse laws in the United States, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers and enhanced penalties for non-compliance.
- § The ACA requires annual reporting of drug samples that manufacturers and distributors provide to physicians.

Some of the provisions of the ACA have yet to be implemented, and there have been judicial and Congressional challenges to certain aspects of the ACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole".

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products.

Further, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and

transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. Such reforms could have an adverse effect on anticipated revenues from our products and product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates.

Foreign Regulation of Drugs

In order to market any product outside of the United States, we will need to comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding development, approval, commercial sales and distribution of our products, and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our products, if approved. Whether or not we obtain FDA approval for a product, we must obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

Employees

As of March 9, 2018, we had 64 full-time employees, including six employees in management (including our executive officers), 27 employees in research and development, 16 employees in manufacturing and operations, five employees in regulatory and quality and 10 employees in finance and administration. All of our full-time employees are employed in the United States.

Facilities

Our corporate headquarters are located in Morrisville, North Carolina, and consist of 36,834 square feet of space under a lease that expires on October 31, 2026 and includes an option to renew for an additional five years through October 31, 2031. The primary use of this location is general office, laboratory, research and development and light manufacturing. In addition, we also have an additional lease in Morrisville, North Carolina consisting of 4,402 square feet of space which lease expires on October 31, 2022 and includes an option to renew for an additional five years through October 31, 2027. The primary use of this location is general office space and research and development laboratories. We believe that our facilities are adequate for our current needs and for the foreseeable future; however, we will continue to seek additional space as needed to accommodate our growth.

Legal Proceedings

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or other body pending or, to the knowledge of our executive officers, threatened against or affecting us, our common stock or any of our officers or directors in their capacities as such, in which an adverse decision could have a materially adverse effect on our financial condition or results of operations.

MANAGEMENT**Executive Officers and Directors**

The following table sets forth the name, age as of March 9, 2018 and position of each of our executive officers and directors. The following also includes certain information regarding our directors' and executive officers' individual experience, qualifications, attributes and skills and brief statements of those aspects of our directors' backgrounds that led us to conclude that they are qualified to serve as directors. Unless otherwise stated, the business address for all of our executive officers and members of our Board is c/o Liquidia Technologies, Inc., 419 Davis Drive, Suite 100, Morrisville, North Carolina 27560.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Executive Officers		
Neal Fowler	56	Chief Executive Officer and Director
Kevin Gordon	55	President and Chief Financial Officer
Robert Lippe	53	Chief Operations Officer
Dr. Robert Roscigno	51	Senior Vice President, Product Development
Dr. Benjamin Maynor	43	Senior Vice President, Research and Development
Non-Employee Directors		
Dr. Seth Rudnick ⁽²⁾⁽³⁾⁽⁴⁾	69	Chairman of the Board and Director
Dr. Stephen Bloch ⁽¹⁾⁽³⁾	55	Director
Edward Mathers ⁽³⁾	57	Director
Dr. Isaac Cheng ⁽¹⁾	42	Director
Dr. Ralph Snyderman ⁽²⁾⁽⁴⁾	78	Director
Arthur Kirsch ⁽¹⁾	66	Director
Jason Rushton	48	Director
Raman Singh ⁽²⁾	47	Director
Key Employees		
Timothy Albury	49	Senior Vice President, Chief Accounting Officer
Jason Adair	46	Vice President, Business Development and Strategy

⁽¹⁾ Member of our Audit Committee.

⁽²⁾ Member of our Nominating and Corporate Governance Committee effective upon formation of such committee prior to consummation of this offering.

⁽³⁾ Member of our Compensation Committee.

⁽⁴⁾ Member of our Research and Development Committee.

Executive Officers

Neal Fowler has been our Chief Executive Officer and a member of our Board since March 2008. Mr. Fowler also served as a director of Envisia Therapeutics Inc. from November 2013 until November 2017. From June 2006 to March 2008, Mr. Fowler served as president of Centocor, Inc., a subsidiary of Johnson & Johnson, which focused on the development and commercialization of industry-leading biomedicines used to treat chronic inflammatory diseases. From July 2004 to June 2006, Mr. Fowler was the president of Ortho-McNeil Neurologics, Inc. and from October 2001 to July 2004, the vice president of the central nervous system business of Ortho-McNeil-Janssen Pharmaceuticals, Inc. From June 1988 to October 2001, Mr. Fowler held a variety of sales, marketing and business development roles at Eli Lilly and Company in

the pharmaceutical and medical device divisions. Mr. Fowler is currently a director of Aralez Pharmaceuticals, Inc. (Nasdaq: ARLZ). Mr. Fowler graduated from UNC with a Bachelor of Science in Pharmacy and holds a Master of Business Administration from UNC. We believe Mr. Fowler is qualified to serve on our Board due to his extensive and broad range of experience in business and healthcare product development, including previous experience growing companies in the pharmaceutical industry.

Kevin Gordon has been our President and Chief Financial Officer since January 2018. From October 2015 until his retirement in October 2016, Mr. Gordon served as executive vice president and chief operating officer of Quintiles (now named IQVIA Holdings Inc.) (NYSE: IQV), today a global biopharmaceutical services provider. From July 2010 to December 2015, Mr. Gordon served as executive vice president and chief financial officer of Quintiles. Prior to joining Quintiles, Mr. Gordon spent 13 years with Teleflex Incorporated (NYSE: TFX), a health care company, most recently serving as executive vice president and chief financial officer from March 2007 to January 2010. Prior to serving at Teleflex, Mr. Gordon spent 12 years in senior finance positions with Package Machinery Company and KPMG. Mr. Gordon is currently a director and the audit committee chairman of Veracyte, Inc. (Nasdaq: VCYT). Mr. Gordon received his Bachelor of Science in Accounting from the University of Connecticut.

Robert Lippe has been our Chief Operations Officer since June 2015. From February 2014 to June 2015, Mr. Lippe served as executive vice president of operations and chief operations officer at Alexza Pharmaceuticals, Inc. From January 2011 to February 2014, Mr. Lippe worked as the head of global operations at Ironwood Pharmaceuticals, Inc., and from March 2002 to January 2011, he was the head of manufacturing for one of Genentech, Inc.'s Vacaville operating facilities. From May 1992 to May 2002, Mr. Lippe worked at Lawrence Livermore National Laboratory as an assurance and facility manager. Mr. Lippe graduated with a Bachelor of Science in Marine Engineering from the United States Coast Guard Academy. Mr. Lippe holds a Master of Business Administration and Public Health from the University of California, Berkeley.

Dr. Robert Roscigno has been our Senior Vice President, Product Development since December 2017. He served as our Senior Vice President, Research and Development from March 2016 until December 2017 and our Vice President, Research and Development from September 2015 until March 2016. From January 2009 to September 2015, Dr. Roscigno served as the executive vice president, global clinical affairs of GeNO, LLC, a pharmaceutical company in the field of inhaled nitric oxide drug products. From July 2007 to January 2009, Dr. Roscigno provided scientific consulting for various companies in the pharmaceutical industry and also worked as a subject matter expert in PAH. From March 1997 to July 2007, Dr. Roscigno was the president and chief operations officer of Lung Rx, Inc., a subsidiary of United Therapeutics Corporation. Prior to Lung Rx, Inc., Dr. Roscigno served in multiple leadership positions at United Therapeutics Corporation. Dr. Roscigno graduated from Trinity College with a Bachelor of Science in Biology. He also holds a Doctor of Philosophy in Cell and Molecular Biology from Duke University.

Dr. Benjamin Maynor has been our Senior Vice President, Research and Development since January 2016. He served as our Vice President, Research and Development from March 2015 to January 2016. He joined us as a scientist in September 2005 and is a co-inventor of our PRINT technology. Dr. Maynor was seconded by us to Envisia Therapeutics Inc. from January 2013 to March 2015 where he served as Envisia's vice president, research. Dr. Maynor was also our Vice President, Research from January 2012 to January 2013, our Executive Director of Research from November 2011 to January 2012, our Director of Research from January 2010 to November 2011, our Principal Scientist from October 2009 to January 2010 and a Scientist of the Company from September 2005 to October 2009. Prior to joining us, Dr. Maynor was a postdoctoral associate at UNC from May 2004 to September 2005. He was also a scientist at Polestar Technologies, Inc. from September 1996 to June 1999. Dr. Maynor graduated from Harvard University with a Bachelor of Arts in Chemistry. He also holds a Doctor of Philosophy in Chemistry from Duke University. He is also a member of both the American Chemical Society and the American

Association of Pharmaceutical Scientists. Dr. Maynor was honored with the Kathryn C. Hach Award for Entrepreneurial Success in 2014 by the American Chemical Society.

Directors

Dr. Seth Rudnick is the Chairman of our Board and has been a member of our Board since March 2008, a member of our Compensation Committee since its formation in August 2016, a member of our Nominating and Corporate Governance Committee since its formation in , 2018 and a member of our Research and Development Committee since its formation in May 2017. Dr. Rudnick is currently a director of G1 Therapeutics, Inc. (Nasdaq: GTHX) and Aralez Pharmaceuticals, Inc. (Nasdaq: ARLZ). Dr. Rudnick previously served as a partner at Canaan Partners, a global venture capital firm, from January 1998 to December 2013. From January 1991 to January 1998, Dr. Rudnick was the chief executive officer and chairman of CytoTherapeutics, Inc. From July 1986 to January 1991, Dr. Rudnick worked at Ortho Biotech, Inc., a subsidiary of Johnson & Johnson, where he served as vice president, head of research and development. Dr. Rudnick also previously held directorships at Square 1 Bank, LQ3 Pharmaceuticals, Inc. and Spine Wave, Inc. Dr. Rudnick graduated from the University of Pennsylvania with a Bachelor of Arts in History. He also holds a Doctor of Medicine from the University of Virginia and a Diplomate in the Specialty of Internal Medicine from the American Board of Internal Medicine. We believe Dr. Rudnick is qualified to serve on our Board due to his industry experience, experience as a venture capitalist and senior executive and his experience of serving on the board of directors for several public and private pharmaceutical and life sciences companies.

Dr. Stephen Bloch has been a member of our Board since July 2009, a member of our Audit Committee since its formation in August 2016 and the Chairman of our Compensation Committee since its formation in August 2016. Dr. Bloch is currently a director of a number of private life sciences companies and served as a director of Marinus Pharmaceuticals, Inc. (Nasdaq: MRNS) from September 2005 until April 2016. Dr. Bloch has been a general partner at Canaan Partners, a global venture capital firm, since November 2007. From August 2003 to November 2007, Dr. Bloch was a principal at Canaan Partners. From January 1995 to June 2002, Dr. Bloch was the founder and chief executive officer of Radiology Management Sciences, LLC, a specialty medical management company. Dr. Bloch graduated from Dartmouth College with a Bachelor of Arts. Dr. Bloch also holds a Doctor of Medicine from the University of Rochester and a Master of Arts in the History of Science and Public Policy from Harvard University. We believe Dr. Bloch is qualified to serve on our Board due to his financial expertise, experience as a venture capitalist and his experience of serving on the board of directors for several public and private pharmaceutical and life sciences companies.

Edward Mathers has been a member of our Board since July 2009 and a member of our Compensation Committee since its formation in August 2016. Mr. Mathers is currently a partner at New Enterprise Associates, Inc., a global venture capital firm that invests in technology and healthcare companies. Mr. Mathers is currently a director of ObsEva SA (Nasdaq: OBSV), Ra Pharmaceuticals, Inc. (Nasdaq: RARX), Rhythm Pharmaceuticals, Inc. (Nasdaq: RYTM), Synlogic, Inc. (Nasdaq: SYBX) and a number of private life sciences companies. From July 2002 to August 2008, Mr. Mathers was the executive vice president, corporate development and venture of MedImmune, Inc. From August 2000 to July 2002, he was the vice president, marketing and corporate licensing and acquisitions, of Nektar Therapeutics, Inc. Prior to this, Mr. Mathers worked at Glaxo Wellcome, Inc. from July 1997 to August 2000, where he last held the role of vice president, e-business. Mr. Mathers graduated from the North Carolina State University with a Bachelor of Science in Chemistry. We believe Mr. Mathers is qualified to serve on our Board due to his experience as a venture capitalist, his experience as an executive and in business development and his experience in serving on the board of directors for several public and private pharmaceutical and life sciences companies.

Dr. Isaac Cheng has been a member of our Board since January 2010 and a member of our Audit Committee since its formation in August 2016. Dr. Cheng is currently an investment professional at the Morningside Technology Advisory, LLC, a division of the Morningside Group, a group that invests in venture

capital and private equity opportunities. He currently sits on the board of directors of NuCana PLC (Nasdaq: NCNA) and also sits on the boards of several of Morningside Group's private life sciences portfolio companies. Dr. Cheng previously served as director of research and development at Serica Technologies, Inc., from April 2004 to January 2005. Prior to that, Dr. Cheng was a scientific associate director of clinical development and medical affairs at Novartis Pharmaceuticals Corporation from March 2002 to April 2004. Dr. Cheng was also the recipient of a Howard Hughes Medical Institute Research Fellowship which supported his research in the Genetics and Aging Unit of the Massachusetts General Hospital and Harvard Medical School. Dr. Cheng graduated from the Tufts University School of Medicine with a Doctor of Medicine. We believe Dr. Cheng is qualified to serve on our Board due to his financial expertise, experience as a venture capitalist, industry experience and his experience in serving on the board of directors for several public and private life sciences companies.

Dr. Ralph Snyderman has been a member of our Board since February 2007, the Chairman of our Nominating and Corporate Governance Committee since its formation in 2018 and a member of our Research and Development Committee since its formation in May 2017. Dr. Snyderman is currently a director of CareDx, Inc. (Nasdaq: CDNA), iRhythm Technologies, Inc. (Nasdaq: IRTC) and a number of private life sciences companies. Dr. Snyderman also served as a director of Argos Therapeutics, Inc. (Nasdaq: ARGX) from December 2016 until March 2017. Dr. Snyderman is currently Chancellor Emeritus of Duke University, the James B. Duke Professor of Medicine, as well as a director of the Duke Center for Research on Personalized Health Care. From January 1989 to July 2004, he served as Chancellor for Health Affairs and Dean of the Duke University School of Medicine. From July 1998 to July 2004, Dr. Snyderman also oversaw the development of the Duke University Health System as its first president and chief executive officer. From January 1987 to June 1989, Dr. Snyderman served as senior vice president, medical research and development at Genentech, Inc. From February 1972 to June 1987, he was a Professor of Medicine at the Duke University. From July 1970 to February 1972, Dr. Snyderman started his career at the National Institutes of Health as a senior investigator. Dr. Snyderman previously served as a venture partner at New Enterprise Associates, Inc., a venture capital firm, from January 2006 to November 2009. Dr. Snyderman graduated from Washington College with a Bachelor of Science and from the State University of New York Downstate Medical Center with a Doctor of Medicine. Dr. Snyderman holds an honorary Doctor of Science from the State University of New York and an honorary Doctor of Science from Washington College. He currently holds memberships in the American Academy of Arts & Sciences, the National Academy of Medicine as well as the Association of American Physicians. Dr. Snyderman is also a recipient of several awards, including the Pioneer Award by the Personalized Medicine World Congress in 2016, as well as the North American Healthcare Lifetime Achievement Award by Frost & Sullivan in 2008 for his leadership in the field of personalized health care. We believe Dr. Snyderman is qualified to serve on our Board due to his extensive industry experience and knowledge and his experience serving on the board of directors of several public and private biotechnology and life sciences companies.

Arthur Kirsch has been a member of our Board since September 2016 and the Chairman of our Audit Committee since its formation in August 2016. Mr. Kirsch is currently a director of Aralez Pharmaceuticals, Inc. (Nasdaq: ARLZ). From August 2015 until October 2016, Mr. Kirsch served as a director of Immunomedics, Inc. (Nasdaq: IMMU). Since June 2005, Mr. Kirsch has served as the managing director and senior advisor, as well as global head of medical devices and diagnostics, of GCA Global, LLC, a global investment banking firm. From May 1994 to May 2004, he served as executive vice president, head of research at Vector Securities, LLC. From February 1990 to May 1993, Mr. Kirsch served as president of Natwest Securities Limited. From June 1979 to February 1990, Mr. Kirsch worked at Drexel Burnham Lambert, Inc., an investment banking firm, where he held the position of executive vice president, head of equity division. Mr. Kirsch graduated from the University of Rhode Island with a Bachelor of Science and also holds a Master of Business Administration from The City University of New York. We believe Mr. Kirsch is qualified to serve on our Board due to his business and financial expertise and his experience serving on the boards of directors of several public pharmaceutical and life sciences companies.

Jason Rushton has been a member of our Board since July 2017. Mr. Rushton has been a partner at Xeraya Capital Labuan Ltd, a life science venture capital fund of Khazanah Nasional, a Malaysian sovereign wealth fund, since October 2016. From February 2011 to June 2016, he served as director in the corporate finance advisory arm of Deloitte AG, where he provided corporate finance advisory services to clients in the life sciences industry. From November 2010 to January 2011, Mr. Rushton was self-employed as a consultant providing independent strategy consulting services. From September 2006 to May 2010, Mr. Rushton was an investment manager at Inventages Venture Capital Investment, Inc., a life science investment fund established by Nestlé S.A. From July 2000 to August 2006, Mr. Rushton was also an associate in Merlin Biosciences Fund, L.P., a life science investment fund, and, from June 1997 to July 2000, he was a management consultant in PA Consulting Group, a global management consulting firm. From 1994 to June 1997, Mr. Rushton worked as a biologist in Eli Lilly and Company, a global pharmaceutical company. Mr. Rushton holds a Master of Science in Immunology from the University of Birmingham. We believe Mr. Rushton is qualified to serve on our Board due to his business and financial expertise and his experience as a venture capitalist in the healthcare industry.

Raman Singh has been a member of our Board since February 2018 and a member of our Nominating and Corporate Governance Committee since its formation in 2018. Since October 2011, Mr. Singh has served as the chief executive officer of Mundipharma Pte Limited, which is part of a network of independent associated companies active in the fields of analgesia, oncology, ophthalmology, respiratory, specialty care and consumer health. Mr. Singh graduated from Osmania University with a Bachelors in Mechanical Engineering in 1992. He also holds Masters in International Management from Thunderbird School of Global Management and in Business Administration from Assumption University. We believe Mr. Singh is qualified to serve on our Board due to his vast industry experience and knowledge as well as his business experience.

Key Employees

Timothy Albury has been our Senior Vice President, Chief Accounting Officer since January 2018. From June 2013 until January 2018, Mr. Albury served as our Chief Financial Officer. From September 2009 to June 2013, Mr. Albury served as the chief financial officer of Osmotica Pharmaceutical Corp., a multinational specialty pharmaceutical company in the field of osmotic drug delivery. Mr. Albury graduated from Liberty University with a Bachelor of Science and completed a Master of Professional Accounting program at the University of Miami. He is also a Certified Public Accountant with the North Carolina State Board of Certified Public Accountant Examiners and the State of Florida Board of Accountancy as well as a member of the American Institute of Certified Public Accountants.

Jason Adair has been our Vice President, Business Development and Strategy since January 2016. From August 2011 through December 2015, Mr. Adair served as the executive director of corporate development at BioCryst Pharmaceuticals, Inc. (Nasdaq: BCRX). Mr. Adair holds a Bachelor of Science in Chemistry from Wake Forest University and a Master of Business Administration from the Tuck School of Business at Dartmouth College.

Corporate Governance

Board Composition

Our amended and restated bylaws that will become effective upon the closing of this offering provides that our Board shall consist of that number of directors to be determined from time to time by vote of our Board, provided that such authorized number shall be no fewer than three and no greater than 11 members, and is currently set at nine members. Currently our Board consists of Drs. Bloch, Cheng, Rudnick and Snyderman, and Messrs. Fowler, Kirsch, Mathers, Rushton and Singh.

In accordance with our amended and restated bylaws and our amended and restated certificate of incorporation, which will be in effect upon the closing of this offering, our Board will be divided into three classes with staggered three-year terms. At each annual meeting of stockholders after the initial

classification, the successors to the directors whose terms will then expire will be elected to serve from the time of election and qualification until the third annual meeting following their election. Our directors will be divided among the three classes as follows:

- § the Class I directors will be Mr. Mathers and Dr. Snyderman, and their terms will expire at the annual meeting of stockholders to be held in 2019;
- § the Class II directors will be Drs. Bloch and Rudnick and Mr. Singh, and their terms will expire at the annual meeting of stockholders to be held in 2020; and
- § the Class III directors will be Messrs. Fowler and Kirsch, and their terms will expire at the annual meeting of stockholders to be held in 2021.

Effective upon completion of this offering, Dr. Cheng and Mr. Rushton will no longer serve on our Board.

Any increase or decrease 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. This classification of our Board may have the effect of delaying or preventing changes in control of our company.

Election Arrangements

Each of our directors were elected pursuant to a voting agreement by and among us, our preferred stockholders and our common stockholders. These provisions will terminate upon the closing of this offering and there will be no further contractual obligations, or terms of our outstanding securities, regarding the election of our directors.

Director Independence

Our Board has determined that upon completion of this offering, Drs. Bloch, Rudnick and Snyderman, and Messrs. Kirsch, Mathers and Singh will be independent directors. In making this determination, our Board applied the standards set forth in the Nasdaq listing standards and in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. In evaluating the independence of Drs. Bloch, Rudnick and Snyderman, and Messrs. Kirsch, Mathers and Singh, our Board considered their current and historical employment, any compensation we have given to them, any transactions we have entered into with them, their beneficial ownership of our capital stock, their ability to exert control over us, all other material relationships they have had with us and the same facts with respect to their immediate families. The Board also considered all other relevant facts and circumstances known to it in making this independence determination. In addition, Drs. Bloch, Rudnick and Snyderman, and Messrs. Kirsch, Mathers and Singh are non-employee directors, as defined in Rule 16b-3 of the Exchange Act.

Code of Conduct

In October 2016, we adopted a code of conduct, which applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Prior to consummation of this offering, we will amend our code of conduct to qualify as a "code of ethics" as defined by the rules of the SEC. Following the completion of this offering, the code of conduct will be available on our website at www.liquidia.com. We intend to disclose any amendments to the code of conduct, or any waivers of its requirements, on our website to the extent required by the applicable rules and exchange requirements. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus.

Board Committees

Audit Committee

The Audit Committee of our Board oversees the quality and integrity of our financial statements and other financial information, accounting and financial reporting processes, internal controls and procedures for financial reporting and internal audit function. It also oversees the audit and other services provided by our independent auditors and is directly responsible for the appointment, independence, qualifications, compensation and oversight of the independent auditor. In addition, our audit committee is responsible for

reviewing our compliance with legal and regulatory requirements, and it assists the Board in an initial review of recommendations to the Board regarding proposed business transactions.

The current members of our Audit Committee are Drs. Bloch and Cheng and Mr. Kirsch. The Chairman of our Audit Committee is Mr. Kirsch. Upon the effectiveness of the registration statement of which this prospectus forms a part, the members of our Audit Committee will be Dr. Bloch and Messrs. Kirsch and Singh, with Mr. Kirsch continuing to serve as Chairman. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and Nasdaq. Our Board has determined that Mr. Kirsch is an "audit committee financial expert" as defined under the applicable rules of the SEC and has the requisite financial sophistication as defined under the applicable rules and regulations of Nasdaq. Under the rules of the SEC, members of the audit committee must also meet heightened independence standards. Our Board has determined that each of Dr. Bloch and Messrs. Kirsch and Singh are independent under the heightened audit committee independence standards of the SEC and Nasdaq. The Audit Committee operates under a written charter that satisfies the applicable standards of the SEC and Nasdaq.

Compensation Committee

The Compensation Committee of our Board reviews and determines the compensation of all of our executive officers and establishes our compensation policies and programs. Specific responsibilities of our compensation committee will include, among other things, evaluating the performance of our Chief Executive Officer and determining our Chief Executive Officer's compensation. It also determines the compensation of our other executive officers. In addition, our Compensation Committee administers all equity compensation plans and has the authority to grant equity awards subject to the terms and conditions of such equity compensation plans. Our Compensation Committee also reviews and approves various other compensation policies and matters, including establishing policies and making recommendations to our Board regarding director compensation. Our Compensation Committee may also review and discuss with management the compensation discussion and analysis that we may be required from time to time to include in SEC filings, and it may prepare a compensation committee report on executive compensation as may be required from time to time to be included in our annual proxy statements or annual reports on Form 10-K filed with the SEC.

The current members of our Compensation Committee are Drs. Bloch and Rudnick and Mr. Mathers. The Chairman of our Compensation Committee is Dr. Bloch. Upon the effectiveness of the registration statement of which this prospectus forms a part, the members of our Compensation Committee will be Drs. Bloch and Rudnick and Mr. Mathers, with Dr. Bloch continuing to serve as Chairman. Each of the members of our Compensation Committee is independent under the applicable rules and regulations of Nasdaq, and is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act. The Compensation Committee operates under a written charter that satisfies the applicable standards of the SEC and Nasdaq.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of our Board, which will be formed prior to the consummation of this offering, will oversee the nomination of directors, including, among other things, identifying, evaluating and making recommendations of nominees to our Board, and evaluating the performance of our Board and individual members of our Board. When identifying nominees, the Nominating and Corporate Governance Committee will consider, among other things, a nominee's character and integrity, level of education and business experience, financial literacy and commitment to represent long-term interests of our equity holders. Our Nominating and Corporate Governance Committee will also be responsible for reviewing developments in corporate governance practices, evaluating the adequacy of our corporate governance practices and making recommendations to our Board concerning corporate governance matters.

Upon its formation, the members of our Nominating and Corporate Governance Committee will be Drs. Snyderman and Rudnick and Mr. Singh, with Dr. Snyderman serving as the Chairman. The composition

of our Nominating and Corporate Governance Committee will, as of the time of the effectiveness of the registration statement of which this prospectus forms a part, meet the requirements for independence under the rules and regulations of the SEC and the listing standards of Nasdaq. The Nominating and Corporate Governance Committee will operate under a written charter that satisfies the applicable standards of the SEC and Nasdaq.

Research and Development Committee

The current members of our Research and Development Committee are Drs. Rudnick and Snyderman, who are, respectively, the Chairman and Vice-Chairman of our Research and Development Committee. The role of our Research and Development Committee is to make recommendations to our Board regarding our research and development functions and programs, including our research and development strategies, priorities and opportunities.

Compensation Committee Interlocks and Insider Participation

None of the members of our Compensation Committee is an executive officer or employee of our company. None of our executive officers serves as a member of the Compensation Committee of any entity that has one or more executive officers serving on our Compensation Committee.

Director Compensation

The following table presents the total compensation for each person who served as a non-employee member of our Board and received compensation for such service during the fiscal year ended December 31, 2017. Other than as set forth in the table and described more fully below, we did not pay any compensation, make any equity awards or non-equity awards to or pay any other compensation to any of the non-employee members of our Board in 2017. We reimburse non-employee members of our Board for reasonable travel expenses. Mr. Fowler, a member of our Board who also serves as our Chief Executive Officer, does not receive any additional compensation for his service as a director. Mr. Fowler's compensation for service as an employee for 2017 is presented in "Executive Compensation — 2017 Summary Compensation Table."

	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Total (\$)
Dr. Seth Rudnick	120,000	120,000
Dr. Stephen Bloch ⁽²⁾	—	—
Edward Mathers ⁽²⁾	—	—
Dr. Isaac Cheng ⁽²⁾	—	—
Dr. Ralph Snyderman	60,000	60,000
Arthur Kirsch	50,000	50,000
Jason Rushton ⁽²⁾	—	—

⁽¹⁾ Fees earned pursuant to a board service agreement.

⁽²⁾ Investor-appointed directors did not receive fees or other compensation for their service on our Board.

The following table lists all outstanding option awards held by our non-employee directors as of December 31, 2017:

<u>Name</u>	<u>Option Awards</u>
Dr. Seth Rudnick	629,016
Dr. Stephen Bloch	—
Edward Mathers	—
Dr. Isaac Cheng	—
Dr. Ralph Snyderman	92,495
Arthur Kirsch	150,000
Jason Rushton	—
Raman Singh	—

Board Service Agreements

Mr. Kirsch and Drs. Rudnick and Snyderman are each parties to individual board service agreements with us which shall terminate upon consummation of this offering. Each individual board service agreement is described below.

Rudnick

On April 1, 2015, we and Dr. Rudnick entered into a board service agreement whereby, in exchange for Dr. Rudnick serving as a non-employee member of the Board and providing periodic additional consulting or advisory services to us from time to time, we (i) pay Dr. Rudnick \$120,000 annually for serving on the Board and (ii) granted a nonstatutory stock option to Dr. Rudnick to purchase 205,000 shares of common stock, with an exercise price equal to \$0.28 per share and vesting over a four year period commencing July 1, 2016, pursuant to the Liquidia Technologies, Inc. Stock Option Plan, as amended, or the 2004 Plan.

Snyderman

On April 1, 2015, we and Dr. Snyderman entered into a board service agreement whereby, in exchange for Dr. Snyderman serving as a non-employee member of the Board and providing periodic additional consulting or advisory services to us from time to time, we (i) pay Dr. Snyderman \$60,000 annually and (ii) granted a nonstatutory stock option to Dr. Snyderman to purchase 100,000 shares of common stock, with an exercise price equal to \$0.28 per share and vesting over a four year period commencing April 1, 2015, pursuant to the 2004 Plan.

Kirsch

On December 7, 2016, we and Mr. Kirsch entered into a board service agreement whereby, in exchange for Mr. Kirsch acting as a non-employee member of the Board, acting as a non-employee chairman of the Audit Committee and providing periodic additional consulting or advisory services to us from time to time, we (i) pay Mr. Kirsch \$35,000 annually for serving on the Board, (ii) pay Mr. Kirsch \$15,000 annually for participating as the Chairman of the Audit Committee and (iii) granted a nonstatutory stock option to Mr. Kirsch to purchase 150,000 shares of common stock, with an exercise price equal to \$1.21 per share and vesting over a four year period commencing December 7, 2016, pursuant to the 2016 Plan.

2018 Option Grant to Raman Singh

In connection with his appointment to our Board, on March 7, 2018 we granted Mr. Singh an option to purchase 285,000 shares of common stock, or the Singh Option Shares, under our 2016 Plan, with one-third of the Singh Option Shares vesting on March 7, 2019, and the remaining two-thirds of the Singh Option Shares vesting monthly thereafter over a period of two years.

Other 2018 Option Grants

On March 7, 2018, we granted each of Mr. Kirsch and Drs. Rudnick and Snyderman options to purchase 135,000, 930,000 and 460,000 shares of common stock, respectively, under our 2016 Plan, with

one-third of such option shares vesting on March 7, 2019 and the remaining two-thirds of such option shares vesting monthly thereafter over a period of two years.

On the date of execution of the underwriting agreement, we expect to grant, under the 2018 Plan, certain directors an aggregate of _____ shares of common stock issuable upon the exercise of stock options.

Non-Employee Director Compensation Policy

Our Board has adopted a non-employee director compensation policy, effective upon effectiveness of the registration statement of which this prospectus forms a part, that is designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. Under the policy, each director who is not an employee will be paid cash compensation from and after the completion of this offering, as set forth below:

	Member Annual Fee (\$)	Chairman Additional Annual Fee (\$)
Board of Directors	35,000	25,000
Audit Committee	7,500	15,000
Compensation Committee	5,000	10,000
Nominating and Corporate Governance Committee	3,750	7,500

Additionally, the Chairman of our Research and Development Committee will be paid \$32,000 annually in cash compensation and the Vice-Chairman of our Research and Development Committee will be paid \$15,000 annually in cash compensation.

EXECUTIVE COMPENSATION

The following section provides compensation information pursuant to the scaled disclosure rules applicable to "emerging growth companies" under the rules of the SEC.

Named Executive Officers

Our named executive officers for the year ended December 31, 2017, which consisted of our principal executive officer and two other most highly compensated executives, were:

- § Neal Fowler;
- § Timothy Albury; and
- § Robert Lippe.

Timothy Albury ceased service as our Chief Financial Officer, and Kevin Gordon began service as our President and Chief Financial Officer, on January 22, 2018.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt following the completion of this offering may differ materially from the currently planned programs summarized in this discussion. See "Cautionary Note Regarding Forward-Looking Statements."

2017 Summary Compensation Table

The following table sets forth certain information with respect to the total compensation paid to the named executive officers for the year ended December 31, 2017:

Name and principal position	Year	Salary (\$)	Non-equity incentive plan compensation (\$)⁽¹⁾	All other compensation (\$)⁽²⁾	Total (\$)
Neal Fowler <i>Chief Executive Officer</i>	2017	411,769	164,800	10,800	587,369
Timothy Albury <i>Former Chief Financial Officer⁽³⁾</i>	2017	341,847	109,454	10,800	462,101
Robert Lippe <i>Chief Operations Officer</i>	2017	397,048	127,126	10,800	534,974

⁽¹⁾ Represents bonuses earned during the fiscal year covered.

⁽²⁾ Represents contributions to our 401(k) plan on behalf of each of our named executive officers.

⁽³⁾ On January 22, 2018, Mr. Albury's title changed from Chief Financial Officer to Senior Vice President, Chief Accounting Officer.

Narrative Disclosure to 2017 Summary Compensation Table**2017 Base Salary**

The named executive officers receive a base salary to compensate them for services rendered to our company. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities.

We expect that, following the completion of this offering, base salaries for the named executive officers will be reviewed periodically by the Board and/or the Compensation Committee, with adjustments expected to be made generally in accordance with the applicable employment agreements, as well as financial and other business factors affecting our company, and to maintain a competitive compensation package for our executive officers.

2017 Performance-Based Compensation and Bonuses

Our named executive officers are entitled to annual bonuses calculated as a target percentage of their annual base salary based upon our Compensation Committee's assessment of their performance and our attainment of targeted goals as set by the Compensation Committee in their sole discretion, and communicated to each named executive officer. For 2017, bonuses were based on the Compensation Committee's assessment of each named executive officer's and our performance.

2017 Other Compensation

We contribute to our 401(k) plan on behalf of our named executive officers, but we have no pension benefits, nonqualified defined contribution or other nonqualified deferred compensation plans for our named executive officers.

Fowler and Gordon Employment Agreements

We entered into an employment agreement with Mr. Fowler, our Chief Executive Officer, on April 1, 2017, pursuant to which he was entitled to an annual base salary of \$412,000, subject to adjustment in the discretion of the Board provided such adjustment may not result in a reduction greater than 10% of his base salary and the opportunity to earn an annual cash bonus of 50% of his base salary, dependent upon the achievement of performance objectives by the executive and our company which are established by the Board. The employment agreement provided that this bonus may be paid in conformance with the terms of an incentive compensation plan and if no such plan exists no later than March 15th of the following year. The employment agreement further provided that Mr. Fowler was entitled to the same fringe benefits as are generally available to our executive officers and certain post-termination benefits in connection with certain terminations of employment.

We entered into an amended and restated employment agreement with Mr. Fowler, our Chief Executive Officer, on January 31, 2018, and an employment agreement with Mr. Gordon, our Chief Financial Officer, on January 22, 2018, together, the Executive Employment Agreements, and individually, an Executive Employment Agreement, pursuant to which Mr. Fowler is entitled to receive an annual base salary of \$480,000 and an annual target bonus equal to 50% of his annual base salary and Mr. Gordon is entitled to receive an annual base salary of \$450,000 and an annual target bonus equal to 40% of his annual base salary. The annual bonus amounts shall be based upon our Board's assessment of Messrs. Fowler and Gordon's respective performances and our attainment of targeted goals as set by the Board in its sole discretion. The Executive Employment Agreements also contain provisions related to a confidentiality, inventions assignment, non-competition and non-solicitation and non-disparagement, pursuant to which each of Messrs. Fowler and Gordon agree to refrain from disclosing our confidential information during or at any time following their employment with us and from competing with us or soliciting our employees or customers during their employment and for 12 months following termination of their employment.

The Executive Employment Agreements provide that, in the event that either Messrs. Fowler's or Gordon's employment is terminated by us without "cause" or by him for "good reason," subject to the execution and effectiveness of a separation agreement and release, he will be entitled to receive (i) an amount equal to (x) 12 months of base salary plus the amount of the bonus he would have earned had he remained employed pro-rated based on the number of days that he was employed with us during the applicable fiscal year, payable on our normal payroll cycle if such termination is not in connection with a "change in control" or (y) 18 months of base salary plus an amount equal to 1.5 times his target bonus and 100% vesting of the unvested portion of his equity for Mr. Fowler and 12 months of base salary plus an amount equal to his target bonus and 100% vesting of the unvested portion of his equity for Mr. Gordon if such

termination is within the 12 month period following a "change in control," and (ii) reimbursement of COBRA premiums for health benefit coverage for him and his immediate family in an amount equal to the monthly employer contribution that we would have made to provide health insurance to Messrs. Fowler or Gordon, as applicable had he remained employed with us for up to 12 months following termination if such termination is not in connection with a "change in control."

Under the Executive Employment Agreements, "cause" means that we have determined, in our sole discretion, that Messrs. Fowler or Gordon has engaged in any of the following: (a) any material breach of the terms of the applicable Executive Employment Agreement, or a willful failure to diligently and properly perform material duties for us; (b) misappropriation or unauthorized use of our tangible or intangible property that causes or is likely to cause material harm to us or our reputation, or material breach of the confidentiality, inventions and non-competition agreement entered between him and our company or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (c) any material failure to comply with our policies or any other policies and/or directives of our Board; (d) use of illegal drugs or any illegal substance, or use of alcohol in any manner that materially interferes with the performance of employment duties; (e) any dishonest or illegal action, or any other action, whether or not dishonest or illegal, which is materially detrimental to our interest and well-being; (f) failure to disclose any material conflict of interest in a transaction being us and any third party which is materially detrimental to our interest and well-being; (g) any adverse action or omission which would be required to be disclosed pursuant to public securities laws or limit our ability, or the ability of any entity affiliated with us, to sell securities under any federal or state law which would disqualify us from any exemption otherwise available to us; or (h) any material violation of our policies prohibiting unlawful harassment, discrimination, retaliation or workplace violence; provided that, before we may terminate Messrs. Fowler or Gordon for cause, if the grounds for such cause are reasonably capable of cure by him, we will provide him with written notice of the grounds of cause and provide him with 10 business days in which to cure such cause.

Under the Executive Employment Agreements, "good reason" means the occurrence of any of the following without the Messrs. Fowler's or Gordon's prior consent, as applicable: (a) a material diminution in the executive's authority, duties or responsibility; (b) a material diminution in the executive's base salary or bonus target; (c) a requirement that the executive report to an employee other than the Board for Mr. Fowler or the Chief Executive Officer for Mr. Gordon; (d) the executive's principal place of employment is relocated by more than 25 miles for Mr. Fowler and 50 miles for Mr. Gordon from our present location in Research Triangle Park, North Carolina; or (e) for Mr. Fowler only, materially breach our obligations under his Executive Employment Agreement. In addition, for any of the above events to constitute good reason, Mr. Fowler or Mr. Gordon, as applicable, must inform us of the existence of the event within 90 days of the initial existence of the event, after which date we shall have no less than 30 days to cure the event which otherwise would constitute good reason, and Mr. Fowler or Mr. Gordon, as applicable, must terminate his employment with us for such good reason no later than 90 days after the initial existence of the event.

Pursuant to his Executive Employment Agreement, on March 7, 2018 Mr. Gordon was granted a stock option award to purchase shares of our common stock equal to 1% (2,146,767 shares) of our capital stock on a fully-diluted basis on the date of grant and a restricted stock unit award equal to approximately 1% (2,146,767 shares) of our capital stock on a fully-diluted basis on the date of grant, or the Sign-On Award. The option and restricted stock unit award vest as to 25% on the first anniversary of Mr. Gordon's start date and, as to the remainder, in 36 equal monthly installments on the first day of each month thereafter, subject to Mr. Gordon's continued employment. Further, on the date of execution of the underwriting agreement Mr. Gordon is also entitled to (i) an additional stock option award under the 2018 Plan to purchase shares of our common stock equal to 1% of our capital stock on a fully-diluted basis on the date of grant (shares assuming we sell shares in this offering) with an exercise price per share equal to the initial public offering price and (ii) a restricted stock unit award under the 2018 Plan equal to 1% of our capital stock on a fully-diluted basis on the date of grant (shares assuming we sell shares).

shares in this offering). These additional awards will be on the same terms as the Sign-On Award (except the vesting start date is as of such grant date) and granted upon the earlier of (i) us consummating an initial public offering of our common stock or (b) us entering into an equity financing transaction or a series of such transactions up to an aggregate amount of \$20 million (excluding the closing of the Series D transaction), or the Additional Equity Grant. Such Additional Equity Grant shall be granted, if at all, on the date of the execution of the underwriting agreement of the initial public offering or closing date of the equity financing, as applicable.

Lippe Employment Agreement

We entered into an employment agreement with Mr. Lippe, our Chief Operations Officer, on April 1, 2017, pursuant to which he is entitled to an annual base salary of \$397,271, subject to adjustment in the discretion of the Board provided such adjustment may not result in a reduction greater than 10% of their base salary and the opportunity to earn an annual cash bonus of 40% of his base salary, dependent upon the achievement of performance objectives by the executive and us established by the Board. The employment agreement provided that this bonus may be in conformance with the terms of an incentive compensation plan and, if no such plan exists, no later than March 15 of the following year. The employment agreement further provided that Mr. Lippe is entitled to the same fringe benefits as are generally available to our executive officers and certain post-termination benefits in connection with certain terminations of employment.

Effective upon consummation of the offering, we will enter into a new employment agreement with Mr. Lippe, or the Lippe Employment Agreement. The Lippe Employment Agreement is for an initial period of two years commencing on the date of the Lippe Employment Agreement, or the Lippe Initial Term.

Pursuant to the terms of Lippe Employment Agreement, Mr. Lippe is entitled to an annual base salary of \$397,300 and is eligible to receive a discretionary annual cash bonus of up to 40.0% of his annualized base salary.

The base salary of Mr. Lippe may be increased from time to time by our Board, and, notwithstanding anything to the contrary, may also be reduced if our Board determines such reduction is necessary and justified by our financial condition and implements an equal percentage reduction in the base salaries of all of our executive officers, provided that such reduction will not be greater than 10.0% of the base salary.

During the Lippe Initial Term, we may terminate Mr. Lippe's employment with us at any time by giving written notice. In addition, during the Lippe Initial Term, Mr. Lippe may resign from his employment with us at any time and for any reason by giving three months' advance written notice, or the Lippe Notice Period, provided that (a) we may set a termination date at any time between the date of such notice and the original effective date of resignation, in which case Mr. Lippe's resignation shall be effective as of such other date, (b) we may request that he provide services in a modified capacity during the entire or any portion of the Lippe Notice Period or (c) we and Mr. Lippe may mutually agree to adjust the Lippe Notice Period; and, in any event, Mr. Lippe is entitled to be paid his salary through the end of the Lippe Notice Period.

Following the Lippe Initial Term, in accordance with the employment practices in North Carolina, Mr. Lippe will be employed by us on an at-will basis, meaning that either we or such executives may terminate their employment with us at any time without giving advance notice. The Lippe Employment Agreement is governed by the laws of North Carolina and the notice periods mentioned above that have been included in the Lippe Employment Agreement may be subject to interpretation in accordance with the laws of North Carolina and the employment practices in North Carolina as well.

In the event we terminate Mr. Lippe's employment with us at any time without "cause" or Mr. Lippe resigns from his employment with us for "good reason", as such terms are defined in the Lippe Employment Agreement, then he will be entitled to receive, subject to his compliance with certain obligations:

- (a) an amount equal to his then-current salary for nine months, or the Lippe Severance Period;
- (b) a pro-rated bonus for the financial year in which the termination of Mr. Lippe's employment occurred; and
- (c) payment of the employer portion of the premiums required to continue his group healthcare coverage under the applicable provisions of the U.S. Consolidated Omnibus Budget Reconciliation Act of 1985, or COBRA, provided that he elects to continue and remains eligible for these benefits, until the earliest of (i) the close of the Lippe Severance Period, (ii) the expiration of his eligibility for the continuation coverage under COBRA or (iii) the date when he becomes eligible for substantially equivalent health insurance coverage in connection with new employment.

In the event Mr. Lippe's employment with us is terminated for cause or due to his death or "disability", as defined in the Lippe Employment Agreement or Mr. Lippe resigns from his employment with us for any reason other than a resignation for good reason, he will not receive any severance compensation or benefits.

Under the Lippe Employment Agreement, "cause" means that we have determined, in our sole discretion, that he has engaged in any of the following: (a) any material breach of the terms of the Lippe Employment Agreement, or a willful failure to diligently and properly perform material duties for us; (b) misappropriation or unauthorized use of our tangible or intangible property that causes or is likely to cause material harm to us or our reputation, or material breach of the confidentiality, inventions and non-competition agreement entered between him and our company or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (c) any material failure to comply with our policies or any other policies and/or directives of our Board; (d) use of illegal drugs or any illegal substance, or use of alcohol in any manner that materially interferes with the performance of employment duties; (e) any dishonest or illegal action, or any other action, whether or not dishonest or illegal, which is materially detrimental to our interest and well-being; (f) failure to disclose any material conflict of interest in a transaction being us and any third party which is materially detrimental to our interest and well-being; (g) any adverse action or omission which would be required to be disclosed pursuant to public securities laws or limit our ability, or the ability of any entity affiliated with us, to sell securities under any federal or state law which would disqualify us from any exemption otherwise available to us; (h) becoming prohibited by law or any order from any regulatory body or governmental body from being an employee or director of any company, firm or entity; provided that, before we may terminate Mr. Lippe for cause, if the grounds for such cause are reasonably capable of cure by him, we will provide him with written notice of the grounds of cause and provide him with 10 business days in which to cure such cause.

Under the Lippe Employment Agreement, "good reason" means the occurrence of any of the following without Mr. Lippe's prior consent: (a) a material diminution in his authority, duties or responsibility; (b) a material diminution in his base compensation; (c) a requirement that he report to an employee other than the Chief Executive Officer; (d) his principal place of employment is relocated by more than 25 miles from our present location in Research Triangle Park, North Carolina; or (e) we materially breach our obligations under the Lippe Employment Agreement. In addition, for any of the above events to constitute good reason, Mr. Lippe must inform us of the existence of the event within 90 days of the initial existence of the event, after which date we shall have no less than 30 days to cure the event which otherwise would constitute good reason, and Mr. Lippe must terminate his employment with us for such good reason no later than 90 days after the initial existence of the event. Also, any action taken by us to accommodate a disability of Mr. Lippe or pursuant to the U.S. Family and Medical Leave Act of 1993 does not constitute good reason.

In the event we, or any surviving or acquiring corporation, terminate Mr. Lippe's employment without cause or he resigns for good reason within 12 months following the effective date of a "change in control", as defined in the 2018 Plan, then Mr. Lippe will be eligible to receive, subject to his compliance with certain obligations, the same severance benefits on the same conditions as if he had been terminated by us without cause; provided, however, that (a) the Lippe Severance Period shall be increased to 12 months, (b) Mr. Lippe's annual bonus shall instead be paid at the target amount for the Lippe Severance Period, and (c) in the event that Mr. Lippe's outstanding equity as of the closing of the change in control is assumed or continued (in accordance with its terms) by the surviving entity in a change in control, then 100.0% of the unvested portion of such equity shall become vested.

Albury Employment Agreement

We entered into an amended and restated employment agreement, or the Albury Employment Agreement, with Mr. Albury effective as January 22, 2018.

Under the Albury Employment Agreement, Mr. Albury is entitled to receive an annual base salary of \$352,000, subject to adjustment in the discretion of the Board provided such adjustment may not result in a reduction greater than 10% of his base salary. Mr. Albury is eligible under the Albury Employment Agreement to receive an annual target cash bonus equal to 25% of his base salary dependent upon the achievement of certain individual and Company performance objectives established by the Board. The Albury Employment Agreement provides that this bonus may be paid in conformance with either the terms of an incentive compensation plan or, if no such plan exists, no later than March 15 of the following year. The Albury Employment Agreement further provided that Mr. Albury was entitled to the same fringe benefits as are generally available to our executive officers.

The Albury Employment Agreement provides that, in the event that Mr. Albury's employment is terminated by us without "cause" or by him for "good reason," subject to the execution and effectiveness of a separation agreement and release, he will be entitled to receive (i) an amount equal to 6 months base salary and (ii) reimbursement of COBRA premiums for health benefit coverage for him and his immediate family in an amount equal to the monthly employer contribution that we would have made to provide health insurance to Mr. Albury had he remained employed with us for up to 6 months following termination.

Under the Albury Employment Agreement, "cause" means that we have determined, in our sole discretion, that Mr. Albury has engaged in any of the following: (a) any material breach of the terms of the Albury Employment Agreement, or a willful failure to diligently and properly perform material duties for us; (b) misappropriation or unauthorized use of our tangible or intangible property that causes or is likely to cause material harm to us or our reputation, or material breach of the confidentiality, inventions and non-competition agreement entered between him and us or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (c) any material failure to comply with our policies or any other policies and/or directives of our Board; (d) use of illegal drugs or any illegal substance, or use of alcohol in any manner that materially interferes with the performance of employment duties; (e) any dishonest or illegal action, or any other action, whether or not dishonest or illegal, which is materially detrimental to our interest and well-being; (f) failure to disclose any material conflict of interest in a transaction being us and any third party which is materially detrimental to our interest and well-being; (g) any adverse action or omission which would be required to be disclosed pursuant to public securities laws or limit our ability, or the ability of any entity affiliated with us, to sell securities under any federal or state law which would disqualify us from any exemption otherwise available to us; or (h) any material violation of our policies prohibiting unlawful harassment, discrimination, retaliation or workplace violence; provided that, before we may terminate Mr. Albury for cause, if the grounds for such cause are reasonably capable of cure by him, we will provide him with written notice of the grounds of cause and provide him with 10 business days in which to cure such cause.

Under the Albury Employment Agreement, "good reason" means the occurrence of any of the following without Mr. Albury's prior consent, as applicable: (a) a material diminution in his authority, duties or responsibility; (b) a material diminution in his base salary or bonus target; (c) a requirement that he report to an employee other than the Chief Executive Officer, President or Chief Financial Officer; or (d) his principal place of employment is relocated by more than 50 miles from our present location in Research Triangle Park, North Carolina. In addition, for any of the above events to constitute good reason, Mr. Albury must inform us of the existence of the event within 90 days of the initial existence of the event, after which date we shall have no less than 30 days to cure the event which otherwise would constitute good reason, and Mr. Albury must terminate his employment with us for such good reason no later than 90 days after the initial existence of the event.

Outstanding Equity Awards at December 31, 2017

The following table sets forth information concerning outstanding equity awards at December 31, 2017 for each of our named executive officers, all of which were granted under the 2004 Plan:

Name	Option Awards			
	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$/share)	Option Expiration Date
Neal Fowler	1,000,000	—	0.50	05/13/2018
	1,058,201	—	0.11	11/23/2020
	405,023	—	0.23	11/21/2023
	825,000	495,000 ⁽¹⁾	0.28	05/21/2025
Timothy Albury	129,815	—	0.23	11/21/2023
	52,669	—	0.23	11/21/2023
	155,833	174,167 ⁽¹⁾	0.28	05/21/2025
Robert Lippe	250,000	296,875 ⁽²⁾	0.28	08/27/2025

⁽¹⁾ 2.084% of the shares underlying the option vest monthly commencing August 1, 2015, becoming fully vested on July 1, 2019.

⁽²⁾ 25% of the shares underlying the options vested on July 13, 2016, with 2.084% of the shares vesting monthly thereafter, becoming fully vested on July 13, 2019.

Equity and Other Incentive Compensation Plans

Employee Bonus Plan

We have in place an employee bonus plan, or the Employee Bonus Plan, under which eligible employees are entitled to receive an annual cash bonus determined by the achievement of certain company and individual performance indicators that have been approved by our Compensation Committee and our Board for the relevant financial year.

All regular full-time and part-time employees who are employed by us on the date the bonus payout is made are eligible to receive a cash bonus pursuant to and on the terms of our Employee Bonus Plan. Employees who do not work a full financial year may be paid bonuses on a pro rata basis, at the discretion of our management. All bonus eligibility is subject to the determination of our management.

The determination of the bonus payable to any eligible employee is solely and completely within the discretion of our management, and there is no obligation on our management to award any bonus to any employee. Our Compensation Committee will approve the payment of any management-recommended bonus awards.

Severance Plan

On _____, 2018, we adopted an Executive Severance and Change in Control Plan, or the Severance Plan, under which eligible employees are entitled to receive certain severance benefits, including a lump sum payment, upon the termination of their employment with us, if such termination was (a) initiated by us and not for "cause" or "disability", each as defined under the Severance Plan, or because of death or (b) initiated by the employee for "good reason", as defined under the Severance Plan, or an Involuntary Termination.

Under the Severance Plan, in the event of an Involuntary Termination, we will pay and provide the following to the eligible employee: an amount equal to the employee's annual salary as of the termination date multiplied by the applicable severance multiple within 60 days following such termination, an amount equal to the excess of COBRA coverage over the monthly premium rate for our active employees multiplied by the applicable healthcare assistance multiple within 60 days following such termination, and post-termination nonqualified deferred compensation benefits, equity awards and employee welfare benefits pursuant to the terms of the respective plans and policies under which such benefits are provided, if any. In connection with an Involuntary Termination following a "change in control", as defined under the Severance Plan, we will pay and provide the following to the eligible employee: an amount equal to the sum of the employee's annual salary and target annual incentive (such amounts shall be determined as of the date of termination) multiplied by the applicable severance multiple within 60 days following such termination, an amount equal to the excess of COBRA coverage over the monthly premium rate for our active employees multiplied by the applicable healthcare assistance multiple within 60 days following such termination, and post-termination nonqualified deferred compensation benefits, equity awards and employee welfare benefits pursuant to the terms of the respective plans and policies under which such benefits are provided, if any. As a condition to the receipt of certain of these benefits under the Severance Plan, the employee must execute and not revoke a valid release of claims in the form provided by us.

The severance multiple and healthcare assistance multiple under the Severance Plan is are follows: six months for a termination date prior to or absent a change in control and nine months for a termination date during the two-year period following a change in control.

Generally, employees holding a position of vice president or a more senior position are eligible to be selected by our Compensation Committee to participate in the Severance Plan, except that an individual who is (a) party to an employment agreement with us that provides for payments upon his termination of employment, whether before or after a change in control, or (b) entitled to "deferred compensation" under Section 409A of the Code payable in installments shall not be eligible.

Stock Option Plan (2004)

The 2004 Plan was approved by our Board and our stockholders on November 6, 2004 and November 9, 2004, respectively. The 2004 Plan was most recently amended in June 2015 with the approval of both our Board and our stockholders. Under the 2004 Plan, we have reserved for issuance an aggregate of 9,394,365 shares of our common stock. The number of shares of common stock reserved for issuance is subject to adjustment in the event of any stock dividend, stock split, reverse stock split, combination, reclassification or other similar change in our capital structure.

The shares of common stock underlying awards that expire or are terminated or cancelled without having been fully exercised under the 2004 Plan are added back to the shares of common stock available for issuance under the 2004 Plan.

Our Board has acted as administrator of the 2004 Plan. The administrator has full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, and to determine the specific terms and conditions of each award, subject to the provisions of the 2004 Plan. Persons eligible to participate in the 2004 Plan are our employees, officers, directors, consultants and advisors as selected from time to time by the administrator in its discretion.

The 2004 Plan permits the granting of (1) options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code, or ISOs, and (2) non-statutory stock options, or NSOs. Subject to certain exceptions set forth therein, the per share option exercise price of each option will be determined by the administrator but may not be less than 100% of the fair market value of the common stock on the date of grant, provided that the per share option exercise price of each option granted to an optionee that owns more than 10% of the common stock may not be less than 110% of the fair market value of the common stock on the date of grant. The term of each option will be fixed by the administrator. The administrator will determine at what time or times each option may be exercised.

The 2004 Plan provides that upon the occurrence of a "Transfer of Control," as defined in the 2004 Plan, except as otherwise provided in a particular option agreement, any unexercisable portion of an outstanding option under the 2004 Plan that would have otherwise become exercisable within 12 months following the effective time of the Transfer of Control shall become immediately exercisable as of a date prior to the Transfer of Control, which date shall be determined by the Board. Upon the occurrence of a Transfer of Control, each outstanding option under the 2004 Plan, to the extent not exercised prior to the Transfer of Control, shall terminate as of the effective time of the Transfer of Control, unless such option is assumed by the successor corporation (or parent thereof) or replaced with a comparable option to purchase shares of the common stock of the successor corporation (or parent thereof).

The Board may amend, suspend or terminate the 2004 Plan or any portion thereof at any time, subject to stockholder approval where such approval is required by applicable law. The Board may also amend, modify or terminate any outstanding option award, provided that no amendment to an award may adversely affect a participant's rights without his or her consent, unless such amendment is required to enable an option designated as an incentive stock option to qualify as an incentive stock option.

All options underlying the 2004 Plan were required to be granted within 10 years from November 6, 2004, the date the 2004 Plan was adopted by the Board. As of March 9, 2018, options to purchase 9,198,365 shares of common stock were outstanding under the 2004 Plan. No future grants will be made under the 2004 Plan.

2016 Equity Incentive Plan

The 2016 Plan was adopted by the Board on May 18, 2016 and our stockholders on August 10, 2016 to succeed the 2004 Plan. The 2016 Plan was most recently amended on February 2, 2018. As a result, all options granted under the 2004 Plan remained subject to the terms of the 2004 Plan, but any shares of common stock that otherwise remained available for future grants under the 2004 Plan as of the effective date of the 2016 Plan ceased to be available under the 2004 Plan at such time.

Under the 2016 Plan, we have reserved for issuance an aggregate of 22,811,308 shares of our common stock. The number of shares of common stock reserved for issuance is subject to adjustment in the event of a capitalization event in which we are not paid any consideration including a merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in ASC 718.

The shares of common stock underlying awards that expire or are terminated, surrendered or cancelled without having been fully exercised or are forfeited or repurchased or result in shares of common stock not

being issued under the 2016 Plan are added back to the shares of common stock available for issuance under the 2016 Plan. In addition, shares of common stock tendered to us by a participant to exercise an award are added back to the shares available for grant under the 2016 Plan.

Our Board has acted as administrator of the 2016 Plan. The administrator has full power to, among other things, select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to accelerate the time at which a stock award may be exercised or vest, to amend the 2016 Plan and to determine the specific terms and conditions of each award, subject to the provisions of the 2016 Plan. Persons eligible to participate in the 2016 Plan are our employees, directors and consultants.

The 2016 Plan permits the granting of (1) options to purchase common stock intended to qualify as ISOs, (2) NSOs, (3) stock appreciation rights, (4) restricted stock awards, (5) restricted stock unit awards and (6) other stock awards. The per share option exercise price of each option will be determined by the administrator but may not be less than 100% of the fair market value of the common stock on the date of grant, provided that the per share option exercise price of each option granted to an optionee that owns more than 10% of the common stock may not be less than 110% of the fair market value of the common stock on the date of grant and such option grant may not be exercisable after the ten year anniversary of the date of grant. The term of each option will be fixed by the administrator. The administrator will determine at what time or times each option may be exercised.

The 2016 Plan provides that upon the occurrence of a "Corporate Transaction," as defined in the 2016 Plan, our Board may take one or more of the following actions as to some or all awards outstanding under the 2016 Plan: (i) provide that outstanding options awards will be assumed or substituted by the acquiring or successor corporation, (ii) arrange for the assignment of any reacquisition or repurchase rights held by us in respect of common stock issued pursuant to the stock award to the surviving corporation or acquiring corporation, (iii) accelerate the vesting, in whole or in part, of the stock award to a date prior to the effective time of such Corporate Transaction, (iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us with respect to the stock award, (v) cancel or arrange for the cancellation of the stock award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration as the Board, in its sole discretion, may consider appropriate, or without the payment of consideration or (vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the participant would have received upon the exercise of the stock award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise.

The Board may amend, suspend or terminate the 2016 Plan at any time, subject to stockholder approval where such approval is required by applicable law. Board may also amend, modify or terminate any outstanding award, provided that no amendment to an award may adversely affect a participant's rights without his or her consent.

Unless terminated by the Board, the 2016 Plan will terminate automatically on May 17, 2026. No stock awards may be granted under the 2016 Plan while the 2016 Plan is suspended or after it is terminated.

As of March 9, 2018, options to purchase 14,733,384 shares of common stock were outstanding under the 2016 Plan and 2,146,767 restricted stock units were outstanding under the 2016 Plan. Our Board has determined not to make any further awards under the 2016 Plan following the closing of this offering, at which time the 2018 Plan will become effective.

2018 Long-Term Incentive Plan

The Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, or the 2018 Plan, was approved by our Board on _____, 2018 and our stockholders on _____, 2018 and will become effective as of the date of the completion of this offering, or the Effective Date. No "Awards", as defined below, will be made under the 2004 Plan or the 2016 Plan on or after the Effective Date.

The 2018 Plan is designed to:

- § promote the long-term financial interests and growth of our company and its subsidiaries by attracting and retaining directors and employees, which include management as well as other personnel;
- § motivate management by means of growth-related incentives to achieve long-range goals; and
- § further the alignment of the interests of participants and those of our stockholders, through opportunities for increased stock or stock-based ownership in our company.

The 2018 Plan will remain in effect, subject to the right of our Board or our Compensation Committee to amend or terminate the 2018 Plan at any time, until the earlier of (a) the earliest date as of which all Awards granted under the 2018 Plan have been satisfied in full or terminated and no shares of common stock approved for issuance under the 2018 Plan remain available to be granted under new Awards, or (b) . No Awards will be granted under the 2018 Plan after such termination date. Subject to other applicable provisions of the 2018 Plan, all Awards made under the 2018 Plan on or before , or such earlier termination of the 2018 Plan, shall remain in effect until such Awards have been satisfied or terminated in accordance with the 2018 Plan and the terms of such Awards.

Participation in the 2018 Plan

All of our officers, non-employee directors, employees and consultants are eligible to participate in the 2018 Plan.

Participation by Non-Employee Directors

Although our non-employee directors, including our independent directors, are not involved in the day-to-day running of our operations, they play an important role in furthering our business interests by contributing their experience and expertise. In particular, a number of our independent directors have substantial experience and expertise in pharmaceutical research and development and play an important role in helping us shape our business strategy. It is crucial for us to be able to attract, retain and incentivize such individuals.

It may not always be possible to quantify the services and contributions of our non-employee directors to our company, and accordingly, it may not always be possible to compensate them fully or appropriately by increasing their directors' fees or other cash payments. To that end, participation by non-employee directors in the 2018 Plan will allow us to acknowledge and reward their services and contributions to our company. In addition, we believe that opportunities for increased stock or stock-based ownership in our company will further align the interests of our non-employee directors with the interests of our stockholders.

Administration Plan

The 2018 Plan will be administered by the "Administrator", as defined below, provided that no director shall participate in any deliberation or decision in respect of any stock option, stock appreciation right, stock award, stock unit, performance share, performance unit and/or other stock-based award, each, an Award, and collectively, the Awards, to be granted to him or held by him.

For the purposes of the 2018 Plan, "Administrator" means our Compensation Committee, or such other committee(s) of director(s) duly appointed by our Board or our Compensation Committee to administer the 2018 Plan or delegated limited authority to perform administrative actions under the 2018 Plan, and having such powers as shall be specified by our Board or our Compensation Committee, provided, however, that at any time our Board may serve as the Administrator in lieu of or in addition to our Compensation Committee or such other committee(s) of director(s) to whom administrative authority has been delegated. With respect to any Award to which Section 16 of the Exchange Act applies, the Administrator shall consist of either our Board or a committee of our Board, which committee shall consist of three or more directors, each of whom is intended to be, to the extent required by Rule 16b-3 of the Exchange Act, a "non-employee director" as defined in Rule 16b-3 of the Exchange Act and an "independent director" to

the extent required by the Nasdaq listing rules. Any member of the Administrator who does not meet the foregoing requirements shall abstain from any decision regarding an Award and shall not be considered a member of the Administrator to the extent required to comply with Rule 16b-3 of the Exchange Act.

As of _____, 2018, the Administrator is the Compensation Committee.

The Administrator has the authority, in its sole and absolute discretion, to grant Awards under the 2018 Plan to eligible individuals, and to take all other actions necessary or desirable to carry out the purpose and intent of the 2018 Plan. Further, the Administrator has the authority, in its sole and absolute discretion, subject to the terms and conditions of the 2018 Plan, to, among other things:

- (a) determine the eligible individuals to whom, and the time or times at which, Awards shall be granted;
- (b) determine the type of Awards to be granted to any eligible individual;
- (c) determine the number of shares of common stock to be covered by or used for reference purposes for each Award or the value to be transferred pursuant to any Award; and
- (d) determine the terms, conditions and restrictions applicable to each Award and any shares of common stock acquired pursuant thereto, including, without limitation, (i) the purchase price of any shares of common stock, (ii) the method of payment for shares of common stock purchased pursuant to any Award, (iii) the method for satisfying any tax withholding obligation arising in connection with any Award, including by the withholding or delivery of shares of common stock, (iv) the timing, terms and conditions of the exercisability, vesting or payout of any Award or any shares of common stock acquired pursuant thereto, (v) the performance goals applicable to any Award and the extent to which such performance goals have been attained, (vi) the time of the expiration of an Award, (vii) the effect of a participant's Termination of Service, as defined in the 2018 Plan, on any of the foregoing and (viii) all other terms, conditions and restrictions applicable to any Award or shares of common stock acquired pursuant thereto as the Administrator considers to be appropriate and not inconsistent with the terms of the 2018 Plan.

Size

A total of _____ shares of our common stock will be initially authorized and reserved for issuance under the 2018 Plan. This reserve will automatically increase on January 1, 2019 and each subsequent anniversary through 2028, by an amount equal to the smaller of (a) 4% of the number of shares of common stock issued and outstanding on the immediately preceding December 31, or (b) an amount determined by the Board. This reserve will be not increased to include any shares issuable upon exercise of options granted under our 2016 Plan that expire or terminate without having been exercised in full.

Appropriate adjustments will be made in the number of authorized shares and other numerical limits in the Equity Plan and in outstanding awards to prevent dilution or enlargement of participants' rights in the event of a stock split or other change in our capital structure. Shares subject to awards which expire or are cancelled or forfeited will again become available for issuance under the Equity Plan.

Subject to adjustment as provided in the provision of the 2018 Plan pertaining to the occurrence of certain corporate transactions, the maximum number of shares of common stock that may be issued pursuant to stock options granted under the 2018 Plan that are intended to qualify as ISOs is 15,000,000.

Maximum Entitlements

The Administrator may establish compensation for directors who are not employees of our company or any of our Affiliates, as defined in the 2018 Plan, or the Non-Employee Directors, from time to time, provided that the sum of any cash compensation and the grant date fair value of Awards granted under the 2018 Plan to a non-employee director as compensation for services as a non-employee director during any calendar year may not exceed \$500,000 for an annual grant, provided however that in a non-employee's director first year of service, compensation for services may not exceed \$1,000,000. The Administrator may

make exceptions to this limit for individual non-employee directors in extraordinary circumstances, as the Administrator may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation or in other compensation decisions involving non-employee director.

Awards

Awards may be granted individually or in tandem with other types of Awards, concurrently with or with respect to outstanding Awards. Participants are not required to pay for the application or acceptance of Awards.

Stock Options. The Administrator may, from time to time, grant to eligible individuals Awards of stock options.

Such stock options shall be exercisable at such time or times and subject to such terms and conditions as shall be determined by the Administrator; provided, however, that, Awards of stock options may not have a term in excess of ten years unless otherwise required by applicable law.

The exercise price per share subject to a stock option granted under the 2018 Plan shall not be less than the fair market value of one share on the date of grant of the stock option, except as provided under applicable law or with respect to stock options that are granted in substitution of similar types of awards of a company acquired by our company or with which our company combines (whether in connection with a corporate transaction, such as a merger, combination, consolidation or acquisition of property or stock, or otherwise) to preserve the intrinsic value of such awards.

Except as provided in the applicable award agreement or otherwise determined by the Administrator, to the extent stock options are not vested and exercisable, a participant's stock options shall be forfeited upon his Termination of Service.

Stock Appreciation Rights. The Administrator may, from time to time, grant to eligible individuals Awards of stock appreciation rights. A stock appreciation right entitles the participant to receive, subject to the provisions of the 2018 Plan and the applicable award agreement, a payment having an aggregate value equal to the product of (a) the excess of (i) the fair market value on the exercise date of one share over (ii) the base price per share specified in the award agreement, and (b) the number of shares of common stock specified by the stock appreciation right, or portion thereof, which is exercised. The base price per share specified in the applicable award agreement shall not be less than the lower of the fair market value on the date of grant or the exercise price of any tandem stock option to which the stock appreciation right is related, or with respect to stock appreciation rights that are granted in substitution of similar types of awards of a company acquired by our company or with which our company combines (whether in connection with a corporate transaction, such as a merger, combination, consolidation or acquisition of property or stock, or otherwise) such base price as is necessary to preserve the intrinsic value of such awards.

Stock appreciation rights shall be exercisable at such time or times and subject to such terms and conditions as shall be determined by the Administrator; provided, however, that stock appreciation rights granted under the 2018 Plan may not have a term in excess of ten years unless otherwise required by applicable law.

Except as provided in the applicable award agreement or otherwise determined by the Administrator, to the extent stock appreciation rights are not vested and exercisable, a participant's stock appreciation rights shall be forfeited upon his Termination of Service.

Stock Awards. The Administrator may, from time to time, grant to eligible individuals Awards of unrestricted stock or restricted stock, collectively, Stock Awards. For the purposes of the 2018 Plan, "Restricted Stock" means an Award of shares of common stock that may be subject to certain transferability

and other restrictions and to a risk of forfeiture, including by reason of not satisfying certain performance goals.

Restricted Stock shall be subject to such vesting, restrictions on transferability and other restrictions, if any, and risk of forfeiture as the Administrator may impose at the date of grant or thereafter. The period during which such vesting or transferability and other restrictions and/or risk of forfeiture applies, or the Restriction Period, may lapse under such circumstances, including without limitation upon the attainment of performance goals, in such instalments, or otherwise, as the Administrator may determine. Subject to the provisions of the 2018 Plan and the applicable award agreement, during the Restriction Period, the Participant shall not be permitted to sell, assign, transfer, pledge or otherwise encumber Restricted Stock.

Except to the extent restricted under the applicable award agreement, a participant granted Restricted Stock shall have all of the rights of a stockholder including, without limitation, the right to vote. Cash dividends declared payable on of common stock shall be paid, with respect to outstanding Restricted Stock, either as soon as practicable following the dividend payment date or deferred for payment to such later date as determined by the Administrator, and shall be paid in cash or as unrestricted shares of common stock having a fair market value equal to the amount of such dividends or may be reinvested in additional shares of Restricted Stock as determined by the Administrator; provided, however, that dividends declared payable on Restricted Stock granted as a Performance Award shall be held by our company and made subject to forfeiture at least until achievement of the applicable performance goal relating to such shares of Restricted Stock. Shares of common stock distributed in connection with a stock split or stock dividend, and other property distributed as a dividend, shall be subject to restrictions and a risk of forfeiture to the same extent as the Restricted Stock with respect to which such shares of common stock or other property have been distributed.

Except as provided in the applicable award agreement, upon termination of service during the applicable Restriction Period, Restricted Stock and any accrued but unpaid dividends that are at that time subject to restrictions shall be forfeited; provided that the Administrator may provide, by rule or regulation or in any Award Agreement, or may determine in any individual case, that restrictions or forfeiture conditions relating to Restricted Stock will be waived in whole or in part in the event of terminations resulting from specified causes, and the Administrator may in other cases waive in whole or in part the forfeiture of Restricted Stock.

Stock Units. The Administrator may, from time to time, grant to eligible individuals Awards of unrestricted stock units or Restricted Stock Units. For the purposes of the 2018 Plan, "Restricted Stock Unit" means a right granted to a participant to receive shares of common stock or cash at the end of a specified deferral period, which right may be conditioned on the satisfaction of certain requirements, including the satisfaction of certain performance goals.

Restricted Stock Units shall be subject to such vesting, risk of forfeiture and/or payment provisions as the Administrator may impose at the date of grant. The Restriction Period to which such vesting and/or risk of forfeiture applies may lapse under such circumstances, including without limitation upon the attainment of performance goals, in such instalments, or otherwise, as the Administrator may determine.

Until shares of common stock are issued to the participant in settlement of stock units, the participant shall not have any rights of a stockholder with respect to the stock units or the shares of common stock issuable thereunder. The Administrator may grant the participant the right to dividend equivalents on stock units, on a current, reinvested and/or restricted basis, subject to such terms as the Administrator may determine; provided, however, that dividend equivalents declared payable on stock units granted as a Performance Award shall rather than be paid on a current basis, be accrued and made subject to forfeiture at least until achievement of the applicable performance goal relating to such stock units.

Other Stock-Based Awards. The Administrator may, from time to time, grant to eligible individuals Awards in the form of Other Stock-Based Awards. For the purposes of the 2018 Plan, "Other Stock-Based Award" means an Award of shares of common stock or any other Award that is valued in whole or in part by reference to, or that is otherwise based upon, shares of common stock, including without limitation dividend equivalents and convertible debentures.

Adjustment Events

In the event of a merger, consolidation, rights offering, statutory share exchange or similar event affecting our company, each, a Corporate Event, or a stock dividend, stock split, reverse stock split, separation, spinoff, reorganization, extraordinary dividend of cash or other property, share combination or subdivision or recapitalization or similar event affecting the capital structure of our company, each, a Share Change, that occurs at any time after the Effective Date (including any such Corporate Event or Share Change that occurs after such adoption and coincident with or prior to the Effective Date), the Administrator shall make equitable and appropriate substitutions or proportionate adjustments to (a) the aggregate number and kind of shares of common stock or other securities on which Awards under the 2018 Plan may be granted to eligible individuals, (b) the maximum number of shares of common stock or other securities with respect to which Awards may be granted during any one calendar year to any individual, (c) the maximum number of shares of common stock or other securities that may be issued with respect to ISOs granted under the 2018 Plan, (d) the number of shares of common stock or other securities covered by each outstanding Award and the exercise price, base price or other price per share, if any, and other relevant terms of each outstanding Award and (e) all other numerical limitations relating to Awards, whether contained in the 2018 Plan or in award agreements; provided, however, that any fractional shares resulting from any such adjustment shall be eliminated and that no such adjustment shall be made if as a result, the participant receives a benefit that a stockholder does not receive and any adjustment (except in relation to a capitalization issue) must be confirmed in writing by the auditors of our company (acting as experts and not as arbitrators) to be, in their opinion, fair and reasonable.

In the case of Corporate Events, the Administrator may make such other adjustments to outstanding Awards as it determines to be appropriate and desirable, which adjustments may include, without limitation, (a) the cancellation of outstanding Awards in exchange for payments of cash, securities or other property or a combination thereof having an aggregate value equal to the value of such Awards, as determined by the Administrator in its sole discretion (it being understood that in the case of a Corporate Event with respect to which stockholders receive consideration other than publicly traded equity securities of the ultimate surviving entity, any such determination by the Administrator that the value of a stock option or stock appreciation right shall for this purpose be deemed to equal the excess, if any, of the value of the consideration being paid for each share of common stock pursuant to such Corporate Event over the exercise price or base price of such stock option or stock appreciation right shall conclusively be deemed valid and that any stock option or stock appreciation right may be cancelled for no consideration upon a Corporate Event if its exercise price or base price equals or exceeds the value of the consideration being paid for each share of common stock pursuant to such Corporate Event), (b) the substitution of securities or other property (including, without limitation, cash or other securities of our company and securities of entities other than our company) for the shares of common stock subject to outstanding Awards and (c) the substitution of equivalent awards, as determined in the sole discretion of the Administrator, of the surviving or successor entity or a parent thereof; provided, however, that no such adjustment shall be made if as a result, the participant receives a benefit that a stockholder does not receive and any adjustment (except in relation to a capitalization issue) must be confirmed in writing by the auditors of our company (acting as experts and not as arbitrators) to be, in their opinion, fair and reasonable.

Change in Control

In the event of a change in control, as defined in the 2018 Plan, of our company, outstanding awards will terminate upon the effective time of the change in control unless provision is made for the continuation, assumption or substitution of awards by the surviving or successor entity or its parent. Unless an award agreement says otherwise, the following will occur with respect to awards that terminate in connection with a change in control of our company:

- § stock options and stock appreciation rights will become fully exercisable and holders of these awards will be permitted immediately before the change in control to exercise them;
- § restricted stock and stock units with time-based vesting (i.e., not subject to achievement of performance goals) will become fully vested immediately before the change in control, and stock units will be settled as promptly as is practicable in accordance with applicable law; and
- § performance shares and units that vest based on the achievement of performance goals will vest as if the performance goal for the unexpired performance period had been achieved at the target level; and the performance units will be settled as promptly as is practicable in accordance with applicable law.

2018 Plan Amendments

Our Board or our Compensation Committee may amend, alter or discontinue the 2018 Plan, but no amendment, alteration or discontinuation shall be made which would materially impair the rights of a participant with respect to a previously granted Award without such participant's consent, except such an amendment made to comply with applicable law or rule of any securities exchange or market on which our shares of common stock are listed or admitted for trading or to prevent adverse tax or accounting consequences to our company or the participant.

Our Board or our Compensation Committee may, at any time, modify and/or alter any or all of the provisions of the 2018 Plan, except that no modification or alternation of any provision shall be made to the advantage of participants except with the prior approval of stockholders a stockholders' meeting to the extent such amendment requires stockholders' approval under the applicable provisions of the applicable listing exchange rule, including but not limited to (a) expanding the eligibility for participation in the 2018 Plan, (b) increasing the number of shares of common stock which may be issued under the 2018 Plan or to a participant, (c) eliminating or modifying the prohibition set forth in Section 7(f) of the 2018 Plan on repricing of stock options and stock appreciation rights, (d) lengthening the maximum term or lowering the minimum exercise price or base price permitted for stock options and stock appreciation rights, (e) modifying the prohibition on the issuance of reload or replenishment options or (f) materially increasing the benefits accruing to participants under the 2018 Plan.

Amendment of Awards

The Administrator may unilaterally amend the terms of any Award theretofore granted, but no such amendment shall materially impair the rights of any participant with respect to an Award without the participant's consent, except such an amendment made to cause the 2018 Plan or Awards thereunder to comply with applicable law, applicable rule of any securities exchange on which our shares of common stock are listed or admitted for trading, or to prevent adverse tax or accounting consequences for the participant or our company or any of our affiliates. For purposes of the foregoing sentence, an amendment to an Award that results in a change in the tax consequences of the Award to the participant shall not be considered to be a material impairment of the rights of the participant and shall not require the participant's consent.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a description of transactions since January 1, 2015, to which we have been a party, in which the amount involved exceeds or will exceed \$120,000 and in which any of our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest.

Series D Preferred Stock Financing

On February 2, 2018, pursuant to a Series D Preferred Stock Purchase Agreement, we issued and sold, at a price per share equal to \$0.59808, shares of our Series D preferred stock to Canaan VIII L.P., or Canaan, Morningside Venture Investments Limited, or Morningside, New Enterprise Associates, or NEA, Xeraya LT Ltd, or Xeraya, and Robert Lippe, our Chief Operations Officer. The following table sets forth the aggregate number of shares of Series D preferred stock issued to our related parties in this offering:

Participants	Shares of Series D Preferred Stock	Aggregate Purchase Price	
		Cash (\$)	Conversion of Promissory Note (\$)
Canaan ⁽¹⁾	15,887,155	7,500,000	2,001,790
Morningside ⁽²⁾	1,849,490	—	1,106,143
NEA ⁽³⁾	16,502,833	7,500,000	2,370,015
Xeraya ⁽⁴⁾	17,445,780	—	10,433,973
Robert Lippe	91,814	—	54,912

⁽¹⁾ Dr. Bloch, a member of our Board, is a General Partner at Canaan, which is a beneficial holder of more than 5% of our capital stock.

⁽²⁾ Dr. Cheng, a member of our Board, is an Investment Partner at Morningside Technology Advisory, LLC, an affiliate of Morningside, which is a beneficial holder of more than 5% of our capital stock.

⁽³⁾ Mr. Mathers, a member of our Board, is a partner at New Enterprise Associates, Inc., an affiliate of NEA, which is a beneficial holder of more than 5% of our capital stock.

⁽⁴⁾ Mr. Rushton, a member of our Board, is a partner at Xeraya Capital Labuan Ltd., an affiliate of Xeraya, which is a beneficial holder of more than 5% of our capital stock.

Issuance of Unsecured Subordinated Convertible Promissory Notes and Warrants

On January 9, 2017, pursuant to a Note Purchase Agreement, as amended, we issued unsecured subordinated convertible promissory notes, or the Insider Notes, each accruing simple interest at a rate of 8% per year, to Canaan, Morningside, NEA and Robert Lippe in the principal amounts set forth in the following table:

<u>Participants</u>	<u>Principal Amounts of Subordinated Convertible Promissory Notes (\$)</u>	<u>Warrants to Purchase Shares of Common Stock⁽¹⁾</u>
Canaan	1,845,271	687,497
Morningside	1,019,654	379,894
NEA	2,184,704	813,960
Robert Lippe	50,927	18,973

(1) Represents the number of shares of common stock underlying warrants which will be exercisable following the automatic conversion of all outstanding shares of preferred stock, including the Series D preferred stock issued in February 2018, into common stock upon completion of this offering. The exercise price per share underlying the warrants is \$0.001.

On July 17, 2017, pursuant to an additional Note Purchase Agreement, or the Xeraya NPA, we issued an unsecured subordinated convertible promissory note to Xeraya in the principal amount of \$10 million, or the Xeraya Note, accruing simple interest at a rate of 8% per year. In connection with such agreement, we appointed Jason Rushton, a partner at Xeraya Capital Labuan Ltd, an affiliate of Xeraya, to our Board, effective July 17, 2017.

On February 2, 2018, each of the Insider Notes and the Xeraya Note converted into shares of our Series D preferred stock pursuant to the Series D Preferred Stock Purchase Agreement at the rate of one share for each \$0.59808 in principal and accrued interest outstanding under the notes.

Certain Transactions Involving Envisia Therapeutics Inc.

In 2013, we formed Envisia and granted it an exclusive, worldwide, fully paid license to develop therapies using our PRINT technology in specified fields, including ophthalmology, dermatology, articular and otic, or the Envisia License, in exchange for an aggregate of 1,000,000 shares of Envisia common stock. Certain of our significant stockholders purchased shares of Envisia Series A-1 preferred stock in 2013 in a transaction contingent upon the execution of the Envisia License. Each share of preferred stock was initially convertible into one share of common stock. The following table summarizes the ownership of Envisia common and

preferred stock following this transaction, including the relative percentage ownership of the stock on an as-converted basis:

<u>Name</u>	<u>Shares of Common Stock</u>	<u>Shares of Series A Preferred Stock</u>	<u>Aggregate Purchase Price (\$)</u>	<u>Ownership Percentage (%)</u>
Liquidia	1,000,000	—	— ⁽¹⁾	11.6
Canaan	—	2,360,739	9,584,600	27.4
Morningside	—	450,936	1,830,800	5.2
NEA	—	2,360,739	9,584,600	27.4
Other stockholders ⁽²⁾	—	983,484	3,992,968	28.4

(1) We received an aggregate of 1,000,000 shares of Envisia common stock as consideration for the Envisia License.

(2) Consists of Envisia stockholders who were not our related parties.

We understand that Canaan, Morningside and NEA participated in subsequent equity financings with Envisia.

In May 2015, we repurchased the Envisia License with respect to the dermatology and articular fields in exchange for 50,000 shares of the Envisia common stock we held. In March 2017, we repurchased the Envisia License with respect to the otic field, along with other intellectual property rights, in exchange for 75,000 shares of the Envisia common stock we held.

From November 2013 to June 2016, we funded expenses of Envisia related to its facilities, intellectual property and manufacturing under a shared services agreement, totaling \$873,474, \$614,893 and \$0 for the years ended December 31, 2015, 2016 and 2017, respectively. We also provided management services worth \$1.5 million to Envisia during the year ended December 31, 2015. In May 2016, we converted Envisia's unpaid expenses under the shared services agreement into a promissory note in the principal amount of \$985,594, which carried interest at an annual rate of 5.0% and had a stated maturity date of December 31, 2016. Envisia repaid the promissory note in full in August 2016. In October 2017, we entered into a mutual release agreement with Envisia related to intellectual property services under our shared services agreement, pursuant to which we waived \$121,473 in fees owed by Envisia.

In October 2017, Aerie purchased the assets of Envisia for \$25.0 million in cash and shares of Envisia common stock. All of the initial sale proceeds were allocated to the Envisia preferred stockholders in light of their liquidation preference. After such liquidation preferences are satisfied, we do not currently expect that we will receive any portion of the proceeds of this transaction as a holder of Envisia common stock.

Investor Rights Agreement

We have entered into the Seventh Amended and Restated Investors' Rights Agreement, or the IRA, dated as of February 2, 2018. The IRA contains information rights and registration rights, among other things, for certain holders of our capital stock. Pursuant to the terms of the agreement, each of these rights, with the exception of the registration rights, will terminate upon the closing of this offering, except for the registration rights as more fully described below in "Description of Capital Stock — Registration Rights."

Indemnification Agreements and Directors' and Officers' Liability Insurance

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, penalties fines and settlement amounts incurred by the director or executive officer in any action or

proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer.

Policies and Procedures for Related Party Transactions

Our Board has adopted a written related person transaction policy, to be effective upon the consummation of this offering, setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our Audit Committee, but only those independent directors who are disinterested, will be tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction with an unrelated third party and the extent of the related person's interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of March 2, 2018, and as adjusted to reflect the sale of our common stock offered by us in this offering, for:

- § each of our named executive officers;
- § each of our directors;
- § all of our current directors and executive officers as a group; and
- § each person, or group of affiliated persons, known by us to be the beneficial owner of more than 5% of our outstanding shares of common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, which generally means that a person has beneficial ownership of a security if he or she possesses sole or shared voting or investment power of that security, including options or warrants that are currently exercisable or exercisable within 60 days of March 2, 2018. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, convertible securities or other rights, held by such person that are currently exercisable or will become exercisable within 60 days of March 2, 2018, are considered outstanding. We did not, however, deem such shares outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, to our knowledge, the persons and entities named in the table below have sole voting and sole investment power with respect to all shares that they beneficially own, subject to community property laws where applicable. The information in the table below does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Securities Act.

We have based our calculation of the percentage of beneficial ownership prior to this offering on 177,851,306 shares of common stock outstanding as of March 2, 2018, after giving effect to the automatic conversion of all of our outstanding preferred stock, including the Series D preferred stock issued in February 2018, and non-voting common stock into common stock upon the closing of this offering.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Liquidia Technologies, Inc., 419 Davis Drive, Suite 100, Morrisville, North Carolina 27560.

Name of Beneficial Owner	Number of Shares Beneficially Owned Prior to Offering	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering ⁽¹⁾
5% Stockholders:			
New Enterprise Associates 12, Limited Partnership ⁽²⁾	33,469,253	18.7%	%
Canaan VIII L.P. ⁽³⁾	31,583,070	17.7%	%
Xeraya LT Ltd ⁽⁴⁾	17,445,780	9.8%	%
Bill & Melinda Gates Foundation ⁽⁵⁾	13,412,616	7.5%	%
Morningside Venture Investments Limited ⁽⁶⁾	9,680,849	5.4%	%
Named Executive Officers and Directors:			
Neal Fowler ⁽⁷⁾	3,898,418	2.2%	%
Timothy Albury ⁽⁸⁾	859,182	*	*
Robert Lippe ⁽⁹⁾	642,147	*	*
Seth Rudnick ⁽¹⁰⁾	975,504	*	*
Stephen Bloch	—	—	—
Edward Mathers	—	—	—
Isaac Cheng	—	—	—
Ralph Snyderman ⁽¹¹⁾	481,705	*	*
Arthur Kirsch ⁽¹²⁾	53,130	*	*
Jason Rushton	—	—	—
Raman Singh	—	—	—
All current executive officers and directors as a group (14 persons)⁽¹³⁾	7,839,304	4.3%	%

* Represents ownership of less than 1.0%.

⁽¹⁾ Assumes no exercise of the underwriters' option to purchase additional shares of common stock.

⁽²⁾ Consists of (i) 187,121 shares of common stock, (ii) 32,468,172 shares of common stock issuable upon the automatic conversion of outstanding shares of preferred stock held by NEA and NEA Ventures 2006 Limited Partnership, or NEA 2006, an affiliate of NEA, and (iii) 813,960 shares of common stock issuable upon the conversion of an outstanding warrant. The securities held by NEA are indirectly held by (x) NEA Partners 12, Limited Partnership, or NEA Partners 12, the sole general partner of NEA, (y) NEA 12 GP, LLC, or NEA 12 LLC, the sole general partners of NEA Partners 12, and each of the individual managers of NEA 12 LLC. The individual managers of NEA 12 LLC, or the NEA 12 Managers, are M. James Barrett, Peter J. Barris, Forest Baskett, Patrick J. Kerins and Scott D. Sandell. The shares directly held by NEA 2006 are indirectly held by Karen P. Welsh, the general partner of NEA 2006. NEA, NEA Partners 12, NEA 12 LLC and the NEA 12 Managers share voting and dispositive power with regard to our securities directly held by NEA. Karen P. Welsh, the general partner of NEA 2006, has voting and dispositive power with regard to our securities directly held by NEA 2006. All indirect holders of the above referenced securities disclaim beneficial ownership of all applicable securities, except to the extent of their actual pecuniary interest therein. The address of NEA is 1954 Greenspring Drive, Suite 600, Timonium, MD 21093.

⁽³⁾ Consists of (i) 45,419 shares of common stock, (ii) 30,850,154 shares of common stock issuable upon the automatic conversion of outstanding shares of preferred stock and (iii) 687,497 shares of common stock issuable upon the conversion of an outstanding warrant. Canaan Partners VIII LLC is the general partner of Canaan VIII L.P. and has sole investment and voting power over the shares held by Canaan VIII L.P. Brenton K. Ahrens, John V. Balen, Stephen M. Bloch, Wende S. Hutton, Maha S. Ibrahim, Deepak Kamra, Guy M. Russo and Eric A. Young are the managing members of Canaan Partners VIII LLC. No one individual controls Canaan Partners VIII LLC and, therefore, none of the managing members of Canaan Partners VIII LLC individually has investment or voting power with respect to the shares held by Canaan VIII L.P. Investment and voting decisions with respect to the shares held by Canaan VIII L.P. are made by the managing members of Canaan Partners VIII LLC, collectively. Dr. Bloch, a member of our Board, is a managing member of Canaan Partners VIII LLC.

Neither Dr. Bloch nor the other members or managers of Canaan Partners VIII LLC are deemed to indirectly beneficially own the shares beneficially owned by Canaan. The address of Canaan is 285 Riverside Avenue, Suite 250, Westport, CT 06880.

- (4) Consists of 17,445,780 shares of common stock issuable upon the automatic conversion of outstanding shares of Series D preferred stock. All shares are held by Xeraya. Fares Zahir, a director of Xeraya, has sole voting and dispositive power with respect to the shares held by Xeraya. Mr. Zahir disclaims beneficial ownership of the shares held by Xeraya, except to the extent of his pecuniary interest therein, if any. The principal address of Xeraya is Lot 26.03-26.08, Level 26, GTower, No. 199, Jalan Tun Razak, 50400, Kuala Lumpur, Malaysia.
- (5) Consists of 13,412,616 shares of common stock issuable upon the automatic conversion of outstanding shares of Series C-1 preferred stock. For purposes of Rule 13d-3 under the Exchange Act, all shares beneficially owned by the Bill & Melinda Gates Foundation may be deemed to be beneficially owned by William H. Gates III and Melinda French Gates as Co-Trustees of the Bill & Melinda Gates Foundation. The principal address of the Bill & Melinda Gates Foundation is 1432 Elliot Avenue West, Seattle, WA 98119.
- (6) Consists of (i) 9,300,955 shares of common stock issuable upon the automatic conversion of outstanding shares of preferred stock, and (ii) 379,894 shares of common stock issuable upon the conversion of an outstanding warrant. All shares are held by Morningside. Raymond Tang, Louise Garbarino, Peter Stuart Allenby Edwards and Jill Franklin are directors of Morningside, and may be deemed to have joint voting and dispositive power with respect to the shares held by Morningside. Each of Mr. Tang, Ms. Garbarino, Mr. Edwards and Ms. Franklin disclaim beneficial ownership of the shares held by Morningside, except to the extent of his or her pecuniary interest therein, if any. The address of Morningside is 2nd Floor, Le Prince de Galles, 3-5 Avenue des Citronniers, MC 98000, Monaco.
- (7) Consists of (i) 500,000 shares of common stock and (ii) 3,398,418 shares of common stock underlying outstanding options which will have vested within 60 days of March 2, 2018.
- (8) Consists of (i) 474,967 shares of common stock and (ii) 384,215 shares of common stock underlying outstanding options which will have vested within 60 days of March 2, 2018.
- (9) Consists of (i) 203,125 shares of common stock, (ii) 328,235 shares of common stock underlying an outstanding option which will have vested within 60 days of March 2, 2018, (iii) 18,973 shares of common stock issuable upon the conversion of an outstanding warrant and (iv) 91,814 shares of common stock issuable upon the conversion of outstanding shares of Series D preferred stock.
- (10) Consists of (i) an aggregate of 406,250 shares of common stock held by Dr. Rudnick and the Carolyn F. Rudnick, and successors, Trustee Seth A. Rudnick Irrevocable GST Trust u/a 3/1/2014 which is managed by Dr. Rudnick's wife for the benefit of his wife and children, and (ii) 569,254 shares of common stock underlying outstanding options which will have vested within 60 days of March 2, 2018.
- (11) Consists of (i) 418,362 shares of common stock and (ii) 63,343 shares of common stock underlying outstanding options which will have vested within 60 days of March 2, 2018.
- (12) Consists of 53,130 shares of common stock underlying an outstanding option which will have vested within 60 days of March 2, 2018.
- (13) Consists of an aggregate of (i) 2,062,704 shares of common stock, (ii) 5,655,639 shares of common stock underlying outstanding options which will have vested within 60 days of March 2, 2018, (iii) 18,973 shares of common stock issuable upon the conversion of an outstanding warrant, (iv) 10,174 shares of common stock issuable upon the conversion of outstanding shares of non-voting common stock, and (v) 91,814 shares of common stock issuable upon the conversion of outstanding shares of Series D preferred stock, held by eight executive officers and directors.

DESCRIPTION OF CAPITAL STOCK

The following description summarizes important terms of our capital stock. For a complete description, you should refer to our amended and restated certificate of incorporation and amended and restated bylaws, forms of which have been filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant portions of the Delaware General Corporation Law, or the DGCL. References to our amended and restated certificate of incorporation and amended and restated bylaws are to our amended and restated certificate of incorporation and our amended and restated bylaws, respectively, each of which will become effective upon completion of this offering.

General

The following is a summary of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the closing of this offering. This summary does not purport to be complete and is qualified in its entirety by the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, copies of which have been filed as exhibits to the registration statement of which this prospectus forms a part.

Following the closing of this offering, our authorized capital stock will consist of _____ shares of common stock and _____ shares of preferred stock.

Common Stock

As of March 2, 2018, there were 10,118,219 shares of Class A voting common stock outstanding held of record by 81 stockholders; 330,664 shares of Class B non-voting common stock outstanding held of record by nine stockholders; 1,974,430 shares of Series A preferred stock outstanding held of record by 11 stockholders; 1,834,862 shares of Series A-1 preferred stock outstanding held of record by nine stockholders; 4,496,908 shares of Series B preferred stock outstanding held of record by six stockholders; 17,102,578 shares of Series C preferred stock outstanding held of record by ten stockholders, 17,556,178 shares of Series C-1 preferred stock outstanding held of record by three stockholders and 91,147,482 shares of Series D preferred stock outstanding held of record by 31 stockholders. There will be _____ shares of a single class of voting common stock outstanding following the closing of this offering, assuming no exercise of the underwriters' option to purchase additional shares and assuming no exercise of outstanding options and warrants and no delivery of any shares of common stock underlying outstanding restricted stock units. Such number of outstanding shares of common stock also reflects the conversion of all outstanding shares of preferred stock and Class B non-voting common stock into an aggregate of _____ shares of common stock upon the consummation of this offering.

The holders of common stock will be entitled to one vote per share on all matters to be voted upon by the stockholders. The holders of common stock will be entitled to receive ratably those dividends, if any, that may be declared from time to time by our Board out of funds legally available, subject to preferences that may be applicable to preferred stock, if any, then outstanding. In the event of a liquidation, dissolution or winding up of our company, the holders of common stock will be entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The common stock will have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable.

Preferred Stock

Upon the closing of this offering, all outstanding shares of our preferred stock will be converted into an aggregate of _____ shares of our common stock in accordance with our amended and restated certificate of incorporation. After the closing of this offering, there will be no outstanding shares of preferred stock.

Following this conversion and the closing of this offering, our Board will be authorized to issue preferred stock in one or more series, to establish the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of these shares and any qualifications, limitations or restrictions thereof. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common stock, including the loss of voting control to others. At present, we have no plans to issue any of the preferred stock.

Warrants

As of March 2, 2018, we had outstanding warrants to purchase an aggregate of 123,215 shares of our Series B preferred stock at an exercise price of \$3.558 per share. These warrants will continue to be exercisable for an aggregate of 293,233 shares of common stock (after the automatic conversion of all outstanding shares of our preferred stock into shares of common stock upon the closing of this offering), following the closing of this offering at an exercise price of \$3.558 per share. These warrants expire on March 28, 2018.

As of March 2, 2018, we had outstanding warrants to purchase an aggregate of 3,698,128 shares of our Series C-1 preferred stock at an exercise price of \$0.001 per share. These warrants will continue to be exercisable for an aggregate of 4,394,914 shares of common stock following the closing of this offering (after the automatic conversion of all outstanding shares of our preferred stock into shares of common stock upon the closing of this offering), at an exercise price of \$0.001 per share and expire on December 31, 2026.

Registration Rights

We entered into a Seventh Amended and Restated Investor Rights Agreement, or IRA, on February 2, 2018 with our largest stockholders. Subject to the terms of this agreement, Holders, as defined in the Seventh Amended and Restated IRA, of shares having registration rights, or Registrable Securities, as defined in the Seventh Amended and Restated IRA, can demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing, until the earliest to occur of: (i) five years following the consummation of this offering, (ii) as to any Holder, such earlier time after this offering at which such Holder can sell all Registrable Securities held by such Holder (together with any affiliate of the Holder with whom such Holder must aggregate its sales under Rule 144) in a single three (3)-month period without registration in compliance with Rule 144 of the Securities Act or (iii) after the consummation of a "Liquidation Event," as defined in the Seventh Amended and Restated IRA.

Demand Registration Rights. At any time after six months following the closing of this offering, subject to certain exceptions set forth in the Seventh Amended and Restated IRA, if the Holders of at least a majority of the common stock issuable or issued upon conversion of the Series C, Series C-1 and Series D preferred stock, or the Required Holders, demand that we file a registration statement covering the registration of Registrable Securities with an anticipated aggregate offering price of at least \$10 million, we are required to use all commercially reasonable efforts to effect, as soon as practicable, the registration under the Securities Act of all Registrable Securities requested to be registered.

Form S-3 Registration Rights. If we receive from the Holders of Registrable Securities a written request that we effect a registration on Form S-3, we are required to provide written notice of the proposed

registration to all other Holders and use all commercially reasonable efforts to effect the registration of such shares on Form S-3; provided, however, that such Form S-3 registration right is subject to a number of exceptions, such as us being eligible to use Form S-3 at the time such Form S-3 registration request is made, the proposed sale of Registrable Securities to be registered on Form S-3 having an aggregate price to the public (net of any underwriters' discounts or commissions) of at least \$5 million and us not being required to file more than two registration statements on Form S-3 in a 12-month period. Furthermore, we have the ability to delay the filing of a registration statement under specified conditions, such as for a period of time following the effective date of a prior registration statement, if our Board deems it detrimental to us and our stockholders to delay the filing. Such postponements cannot exceed 90 days during any 12-month period and cannot be made more than once in any 12-month period.

Piggyback Registration Rights. If we propose to register any of our securities under the Securities Act in connection with the public offering of such securities, we are required to, at such time, promptly give each Holder party to the Seventh Amended and Restated IRA written notice of such registration. Upon the written request of each such Holder given within 20 days after receipt of our registration notice, we are required to use all commercially reasonable efforts to cause to be registered under the Securities Act all of the Registrable Securities that each holder requests to be registered. In connection with any such offering, we are not required to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed between us and the underwriters selected by us and enter into an underwriting agreement in customary form with such underwriters, and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by us. If marketing factors require a limitation of the number of shares to be underwritten, then the number of shares that may be included in the underwriting will be allocated, first, to us; second, to the Holders other than the Common Holders on a pro rata basis based on the total number of Registrable Securities held by such Holders; third, to the Common Holders on a pro rata basis based on the total number of Registrable Securities held by the Common Holders; and fourth, to any stockholder other than a Holder and/or Common Holder on a pro rata basis.

Expenses of Registration. We will pay all expenses, other than underwriting discounts and commissions, related to any demand, Form S-3 or piggyback registration, including without limitation all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for us and the reasonable fees and disbursements of one counsel for the selling Holders, not to exceed \$50,000.

Indemnification. The Seventh Amended and Restated IRA contains customary cross-indemnification provisions under which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions or other "Violation," as defined in the Seventh Amended and Restated IRA, in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions or other Violation attributable to them.

Termination of Registration Rights. All registration rights granted under the IRA will terminate on the fifth anniversary of the completion of this offering.

Anti-Takeover Effects of Our Charter and Bylaws and Delaware Law

Some provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws, to be effective following the closing of this offering, could make the following transactions more difficult:

- § acquisition of our company by means of a tender offer, a proxy contest or otherwise; and
- § removal of our incumbent officers and directors.

These provisions, summarized below, are expected to discourage and prevent coercive takeover practices and inadequate takeover bids. These provisions are designed to encourage persons seeking to acquire control of our company to negotiate first with our board. They are also intended to provide our management

with the flexibility to enhance the likelihood of continuity and stability if our board determines that a takeover is not in the best interests of our stockholders. These provisions, however, could have the effect of discouraging attempts to acquire us, which could deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices. 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 our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Election and Removal of Directors

Our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that establish specific procedures for appointing and removing members of our board. Under our amended and restated certificate of incorporation and amended and restated bylaws, to be effective following the closing of this offering, our board will consist of three classes of directors: Class I, Class II and Class III. A nominee for director shall be elected to our board if the votes cast for such nominee's election exceed the votes cast against such nominee's election. Each director will serve a three-year term and will stand for election upon the third anniversary of the annual meeting at which such director was elected. In addition, our amended and restated certificate of incorporation and amended and restated bylaws will provide that vacancies and newly created directorships on our board may be filled only by a majority of the directors then serving on our board. Under our amended and restated certificate of incorporation, directors may be removed by the stockholders only by the affirmative vote of the holders of at least a majority of the voting power of all of the then-outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class.

Authorized but Unissued Shares. The authorized but unissued shares of our common stock and our preferred stock will be available for future issuance without any further vote or action by our stockholders. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of our common stock and our preferred stock could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, changes in our management, tender offer, merger or otherwise. In particular, the authorization of undesignated preferred stock makes it possible for our board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company.

Stockholder Action; Advance Notification of Stockholder Nominations and Proposals. Our amended and restated certificate of incorporation and amended and restated bylaws will require that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and will eliminate the right of stockholders to act by written consent without a meeting. In addition, our amended and restated bylaws will provide that candidates for director may be nominated and other business brought before an annual meeting only by the board or by a stockholder who gives written notice to us no later than 90 days prior to nor earlier than 120 days prior to the first anniversary of the last annual meeting of stockholders. These provisions may have the effect of deterring unsolicited offers to acquire our company or delaying changes in our management, which could depress the market price of our common stock.

Special Stockholder Meetings. Under our amended and restated certificate of incorporation and amended and restated bylaws, only the board, the Chairman of our board or our Chief Executive Officer may call special meetings of stockholders.

Delaware Anti-Takeover Law. After this offering, we will be subject to Section 203 of the DGCL, which is an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date that

the person became an interested stockholder, unless the business combination or the transaction in which the person became an interested stockholder is approved in a prescribed manner. Generally, a business combination includes a merger, asset or stock sale, or another transaction resulting in a financial benefit to the interested stockholder. Generally, an interested stockholder is a person who, together with affiliates and associates, owns 15% or more of the corporation's voting stock. The existence of this provision may have an anti-takeover effect with respect to transactions that are not approved in advance by our board, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

No Cumulative Voting. Under Delaware law, cumulative voting for the election of directors is not permitted unless a corporation's certificate of incorporation authorizes cumulative voting. Our amended and restated certificate of incorporation does not provide for cumulative voting in the election of directors. Cumulative voting allows a minority stockholder to vote a portion or all of its shares for one or more candidates for seats on our board. Without cumulative voting, a minority stockholder will not be able to gain as many seats on our board based on the number of shares of our stock the stockholder holds as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board to influence its decision regarding a takeover.

Amendment of Charter Provisions. The amendment of certain of the above provisions in our amended and restated certificate of incorporation and our amended and restated bylaws requires approval by holders of at least a majority of our outstanding capital stock entitled to vote generally in the election of directors.

These and other provisions could have the effect of discouraging others from attempting hostile takeovers, and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Limitation of Liability and Indemnification

Our amended and restated certificate of incorporation provides that no director will be personally liable for monetary damages for breach of any fiduciary duty as a director, except with respect to liability:

- § for any breach of the director's duty of loyalty to us or our stockholders;
- § for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- § under Section 174 of the DGCL (governing distributions to stockholders); or
- § for any transaction from which the director derived any improper personal benefit.

If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of our directors will be eliminated or limited to the fullest extent permitted by the DGCL, as so amended. The modification or repeal of this provision of our amended and restated certificate of incorporation will not adversely affect any right or protection of a director existing at the time of such modification or repeal.

Our amended and restated bylaws will also provide that we will, to the fullest extent permitted by law, indemnify our directors and officers against all liabilities and expenses in any suit or proceeding or arising out of their status as an officer or director or their activities in these capacities. We will also indemnify any person who, at our request, is or was serving as a director, officer, employee, agent or trustee of another corporation or of a partnership, limited liability company, joint venture, trust or other enterprise. We may, by action of our board, provide indemnification to our employees and agents within the same scope and effect as the foregoing indemnification of directors and officers.

Exclusive Forum

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for any (1) derivative action or proceeding brought on behalf of our company, (2) action asserting a claim of breach of a fiduciary duty owed by any director or officer of our company to our company or our company's stockholders, (3) action asserting a claim against our company arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation or our amended and restated bylaws or (4) action asserting a claim against our company governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of our company shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation. However, the enforceability of similar forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. and its address is 250 Royall Street, Canton, MA 02021.

Listing

We have applied to list our common stock on the Nasdaq Global Market under the symbol "LQDA".

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there was no public market for shares of our common stock. Future sales of substantial amounts of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we have applied to list shares of our common stock on the Nasdaq Global Market, we cannot assure you that there will be an active public market for shares of our common stock.

Based upon the number of shares of our common stock outstanding as of _____, 2018, we will have _____ shares of common stock outstanding upon the closing of this offering. All the shares of our common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any such shares which may be held or acquired by our "affiliates," as that term is defined in Rule 144 promulgated under the Securities Act, which shares will be subject to the volume limitations and other restrictions of Rule 144 described below. The remaining _____ shares of common stock will be "restricted securities," as that term is defined in Rule 144. These restricted securities will be eligible for public sale only if they are registered under the Securities Act, or if they qualify for an exemption from registration, for example, under Rule 144 or Rule 701, which are summarized below.

Subject to the provisions of Rules 144 and 701 under the Securities Act and the lock-up agreements described below, these restricted securities will be available for sale in the public market as follows:

Days After Date of this Prospectus	Shares Eligible for Sale	Comment
Date of Prospectus		Shares sold in this offering
90 Days		Shares saleable under Rules 144 and 701 that are not subject to a lock-up agreement
180 Days		Lock-up released; shares saleable under Rules 144 and 701

In addition, of the 23,931,749 shares of our common stock that were subject to options outstanding as of March 9, 2018, options to purchase 7,776,771 shares were exercisable as of March 9, 2018, and all of the warrants to purchase 4,688,147 shares of our common stock outstanding as of March 9, 2018 were exercisable as of that date. Furthermore, none of the 2,146,767 restricted stock units which were outstanding as of March 9, 2018 were exercisable as of such date.

Rule 144

In general, under Rule 144 as in effect on the date of this prospectus, a person who is not one of our affiliates at any time during the three months preceding a sale, and who has beneficially owned shares of our common stock for at least six months, would be entitled to sell an unlimited number of shares of our common stock provided current public information about us is available and, after owning such shares for at least one year, would be entitled to sell an unlimited number of shares of our common stock without restriction. Our affiliates who have beneficially owned restricted securities within the meaning of Rule 144 for at least six months would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

§ 1.0% of the number of shares of our common stock then outstanding, which was equal to approximately _____ shares as of _____, 2018; or

§ the average weekly trading volume of our common stock on the during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Resales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and 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 of \$50,000, the seller must file a notice on Form 144 with the SEC and the Nasdaq Global Market concurrently with either the placing of a sale with the broker or the execution directly with a market maker.

Rule 701

Rule 701 generally allows a stockholder who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company 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 by that rule to wait until 90 days after the date of this prospectus before selling those shares pursuant to Rule 701.

The SEC has indicated that Rule 701 will apply to 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

Following the date of this prospectus, we intend to file one or more registration statements on Form S-8 under the Securities Act to register the issuance of up to _____ shares of common stock under our equity incentive plans. These registration statements will become effective upon filing. All of the shares issued or to be issued upon the exercise of stock options or settlement of other awards under our stock plans are or will be eligible for resale in the public market without restrictions, subject to Rule 144 limitations applicable to affiliates and the lock-up agreements described below.

Lock-up Agreements

Notwithstanding the foregoing, we, our directors, executive officers and other holders of our shares of common stock and options and warrants to purchase our common stock collectively representing substantially all of our outstanding shares of common stock immediately prior to this offering, as well as the holders of our convertible preferred stock, have agreed with the underwriters, subject to limited exceptions, not to offer, sell, contract to sell, pledge, or otherwise dispose of, or to enter into any hedging or swap transaction with respect to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock for a period ending 180 days after the date of this prospectus.

The foregoing does not prohibit the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act during the period or transfers or dispositions by our directors, executive officers and other holders:

- § with the prior written consent of Jefferies LLC and Cowen and Company, LLC;
- § of shares of common stock or other securities acquired in this offering or in open market transactions after the completion of this offering;
- § as a transfer pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction involving a change of control of our company;

- § as a distribution to limited partners, members or stockholders of a holder of our common stock;
- § as a transfer by a business entity to another business entity so long as the transferee controls or is under common control with the holder;
- § as a transfer to a legal representative, heir, beneficiary or a member of the holder's immediate family;
- § as a transfer to any trust for the direct or indirect benefit the holder or the immediate family of the holder and/or charitable organizations;
- § as a bona fide gift, including pursuant to a domestic order or a negotiated divorce settlement, or estate or intestate succession; or
- § as a transfer by operation of law, including pursuant to a court or regulatory agency order, a qualified domestic relations order or in connection with a divorce settlement.

Unless a transfer or disposition is made with the written consent of Jefferies LLC and Cowen and Company, LLC, the permitted transfers and dispositions described above may not be made (i) by any of our directors, executive officers and other holders unless the transfer or disposition does not result in any public disclosure or filing under the Exchange Act reporting a reduction in beneficial ownership of shares of common stock being required or voluntarily made during the lock-up period and (ii) by any of our directors, executive officers and other holders unless the transferee of each such shares agrees to be bound by the lock-up agreement. For more information regarding the lock-up agreements of our directors, executive officers and other holders, see "Underwriters."

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, 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 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 180 days after the date of this offering, subject to early termination, the sale of any shares under such plan would be prohibited by the lock-up agreement that the director or officer has entered into with the underwriters.

**MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS
TO NON-U.S. HOLDERS**

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders, as defined below, of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment) and not in connection with a trade or business conducted or a permanent establishment maintained in the United States. This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- § U.S. expatriates and former citizens or long-term residents of the United States;
- § persons subject to the alternative minimum tax;
- § persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- § banks, insurance companies and other financial institutions;
- § brokers, dealers or traders in securities;
- § "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- § partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- § tax-exempt organizations or governmental organizations;
- § persons deemed to sell our common stock under the constructive sale provisions of the Code;
- § persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- § tax-qualified retirement plans; and
- § "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF

THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- § an individual who is a citizen or resident of the United States;
- § a corporation created or organized under the laws of the United States, 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 that (1) is subject to the primary supervision of a U.S. court and the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

Distributions

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "— Sale or Other Taxable Disposition."

Dividends paid to a Non-U.S. Holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld 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 any applicable income tax treaty.

Sale or Other Taxable Disposition

A Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- § the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- § our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the second bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

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 either our common stock is not regularly traded on an established securities market or a Non-U.S. Holder holds, or is treated as holding, more than 5% of our outstanding common stock, directly or indirectly, during the applicable testing period, any gain recognized by such Non-U.S. Holder will generally be subject to U.S. federal income tax rates in the same manner as if the Non-U.S. Holder were a resident of the United States. 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 also generally be subject to withholding at a rate of 15%. 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

Payments of dividends on our common stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN or W-8BEN-E, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid

to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners", as defined in the Code, or furnishes identifying information regarding each substantial United States owner or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock, and will apply to payments of gross proceeds from the sale or other disposition of such stock on or after January 1, 2019.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2018, among us, Jefferies LLC and Cowen and Company, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

<u>UNDERWRITER</u>	<u>NUMBER OF SHARES</u>
Jefferies LLC	
Cowen and Company, LLC	
Needham & Company, LLC	
Wedbush Securities Inc.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them 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 and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the pricing of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ _____ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$ million. We have also agreed to reimburse the underwriters for certain expenses, including an amount not to exceed \$ in connection with the clearance of this offering with the Financial Industry Regulatory Authority, Inc., as set forth in the underwriting agreement.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We have applied to list our common stock on the Nasdaq Global Market under the symbol "LQDA".

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of all of our outstanding capital stock have agreed, subject to specified exceptions, not to directly or indirectly:

- § sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act;
- § otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially; or
- § publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of Jefferies LLC and Cowen and Company, LLC.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

Jefferies LLC and Cowen and Company, LLC may, in their discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, and certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock 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 to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. 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 the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter's 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. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock

originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

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. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' websites and any information contained in any other website maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriter and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriter and certain of its 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, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

- § a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;

- § a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- § a person associated with our company under Section 708(12) of the Corporations Act; or
- § a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Canada

Resale Restrictions

The distribution of our common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of our common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

Representations of Canadian Purchasers

By purchasing our common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- § the purchaser is entitled under applicable provincial securities laws to purchase the common stock without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106 — Prospectus Exemptions;
- § the purchaser is a "permitted client" as defined in National Instrument 31-103 — Registration Requirements, Exemptions and Ongoing Registrant Obligations;
- § where required by law, the purchaser is purchasing as principal and not as agent; and
- § the purchaser has reviewed the text above under "— Resale Restrictions."

Conflicts of Interest

Canadian purchasers are hereby notified that the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 — *Underwriting Conflicts* from having to provide certain conflict of interest disclosure in this document.

Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this document 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 of our common stock in Canada 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.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of our common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in our common stock in their particular circumstances and about the eligibility of our common stock for investment by the purchaser under relevant Canadian legislation.

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.*

European Economic Area

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive, each, a Relevant Member State, an offer to the public of any shares of common stock which are the subject of the offering contemplated by this prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any shares of common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- § to any legal entity which is a "qualified investor" as defined in the Prospectus Directive;
- § to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriters or the underwriters nominated by us for any such offer; or
- § in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of common stock shall require us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression "offer shares of common stock to the public" in relation to the shares of common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the common stock to be offered so as to enable an investor to decide to purchase or subscribe to the common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures,

whether as principal or agent; or to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong, or SFO, and any rules made under that Ordinance; or 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 CO, or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case 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 under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the Initial Purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common stock may not be circulated or distributed, nor may the common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), 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 common stock is subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- § 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
- § 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, as defined in Section 239(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 common stock pursuant to an offer made under Section 275 of the SFA except:

- § to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

- § where no consideration is or will be given for the transfer;
- § where the transfer is by operation of law;
- § as specified in Section 276(7) of the SFA; or
- § as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus 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 prospectus nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, our company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated, each such person being referred to as a "relevant person".

This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by DLA Piper LLP (US), Short Hills, New Jersey. Cooley LLP is serving as counsel for the underwriters.

EXPERTS

The financial statements as of December 31, 2016 and 2017 and for each of the two years in the period ended December 31, 2017 included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to our ability to continue as a going concern as described in Note 2 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE 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 offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

Upon the closing of this offering, we will be required to file periodic reports, proxy statements and other information with the SEC pursuant to the Exchange Act. You may read and copy this information at the Public Reference Room of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about registrants, like us, that file electronically with the SEC. The address of that site is www.sec.gov. We also maintain a website at www.liquidia.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. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Liquidia Technologies, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Liquidia Technologies, Inc. as of December 31, 2017 and 2016, and the related statements of operations and comprehensive loss, of stockholders' deficit, and of cash flows for the years then ended, including the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, 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.

Substantial Doubt About the Company's Ability to Continue as a Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses and cash outflows from operations, has an accumulated deficit, and debt maturing within twelve months that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 of these financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Raleigh, North Carolina
March 14, 2018

We have served as the Company's auditor since 2014.

Liquidia Technologies, Inc.
Balance Sheets

	December 31,	
	2016	2017
Assets		
Current assets:		
Cash	\$ 1,438,712	\$ 3,418,979
Accounts receivable, less allowance of \$48,108 and \$48,108, respectively	1,149,402	1,622,179
Related party receivable, net, less allowance of \$0 and \$0, respectively	89,318	—
Prepaid expenses and other current assets	468,666	443,460
Total current assets	3,146,098	5,484,618
Property, plant and equipment, net	4,347,711	8,243,012
Prepaid expenses and other assets	992,724	1,115,972
Total assets	<u>\$ 8,486,533</u>	<u>\$ 14,843,602</u>
Liabilities and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 2,407,244	\$ 4,424,948
Accrued expenses	892,859	2,785,618
Accrued compensation	1,953,816	1,952,505
Accrued interest	62,303	1,408,869
Deferred rent	208,914	268,628
Current portion of capital lease obligations	324,512	469,798
Current portion of deferred revenue	3,343,217	3,605,199
Current portion of long-term debt	2,898,101	15,608,349
Total current liabilities	12,090,966	30,523,914
Long-term capital lease obligations	243,426	510,625
Long-term deferred rent	456,904	2,612,552
Long-term deferred revenue	8,724,881	5,527,296
Long-term debt	5,215,559	5,556,782
Deferred financing obligation	—	1,341,810
Warrant liabilities	—	2,462,859
Total liabilities	26,731,736	48,535,838
Commitments and contingencies (Note 10)		
Stockholders' deficit:		
Preferred stock — Series A, \$0.001 par value, 1,974,430 shares authorized, issued and outstanding as of December 31, 2016 and 2017, liquidation preference of \$2,625,992	1,974	1,974
Preferred stock — Series A-1, \$0.001 par value, 1,834,862 shares authorized, issued and outstanding as of December 31, 2016 and 2017, liquidation preference of \$6,000,000	1,835	1,835
Preferred stock — Series B, \$0.001 par value, 4,620,123 shares authorized, 4,496,908 issued and outstanding as of December 31, 2016 and 2017, liquidation preference of \$16,000,000	4,497	4,497
Preferred stock — Series C, \$0.001 par value, 17,102,578 shares authorized, issued and outstanding as of December 31, 2016 and 2017, liquidation preference of \$25,000,035	17,103	17,103
Preferred stock — Series C-1, \$0.001 par value, 17,556,178 and 91,000,000 shares authorized as of December 31, 2016 and 2017, respectively, 17,556,178 issued and outstanding as of December 31, 2016 and 2017, liquidation preference of \$14,000,000	17,556	17,556
Common stock — Class A (voting), \$0.001 par value, 87,615,152 and 175,000,000 shares authorized as of December 31, 2016 and 2017, respectively, 8,978,960 and 9,254,228 shares issued and outstanding as of December 31, 2016 and 2017, respectively	8,979	9,254
Common stock — Class B (non-voting), \$0.001 par value, 330,664 shares authorized, issued and outstanding as of December 31, 2016 and 2017	331	331
Additional paid-in capital	66,016,593	79,668,525
Less: Related party note receivable for stock option exercise	(55,000)	—
Accumulated deficit	(84,259,071)	(113,413,311)
Total stockholders' deficit	<u>(18,245,203)</u>	<u>(33,692,236)</u>
Total liabilities and stockholders' deficit	<u>\$ 8,486,533</u>	<u>\$ 14,843,602</u>

The accompanying notes are an integral part of these financial statements.

Liquidia Technologies, Inc.
Statements of Operations and Comprehensive Loss

	For the year ended	
	December 31,	
	2016	2017
Revenues	\$ 13,216,989	\$ 7,258,123
Costs and expenses:		
Cost of sales	918,778	319,759
Research and development	23,319,886	24,753,876
General and administrative	4,841,128	10,212,774
Total costs and expenses	29,079,792	35,286,409
Loss from operations	(15,862,803)	(28,028,286)
Other income (expense):		
Interest income	14,906	268
Interest expense	(85,865)	(13,010,475)
Derivative and warrant fair value adjustments	—	11,884,253
Total other income (expense), net	(70,959)	(1,125,954)
Net loss	(15,933,762)	(29,154,240)
Other comprehensive loss	—	—
Comprehensive loss	\$ (15,933,762)	\$ (29,154,240)
PER SHARE DATA:		
Basic and diluted net loss per share	\$ (2.16)	\$ (3.08)
Weighted average common shares outstanding, basic and diluted	7,361,596	9,475,083

The accompanying notes are an integral part of these financial statements.

Liquidia Technologies, Inc.

Statements of Stockholders' Deficit

For the years ended December 31, 2016 and 2017

	Preferred Stock								Common Stock				Additional Paid-In Capital	Accumulated Deficit	Stockholders' Deficit		
	Series A		Series A-1		Series B		Series C		Series C-1		Class A Voting					Class B Nonvoting	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				Shares	Amount
Balance as of December 31, 2015	1,974,430	\$ 1,974	1,834,862	\$ 1,835	4,496,908	\$ 4,497	17,102,578	\$ 17,103	17,556,178	\$ 17,556	5,855,807	\$ 5,856	330,664	\$ 331	\$65,171,804	\$ (68,325,309)	\$ (3,104,353)
Exercise of stock options	—	—	—	—	—	—	—	—	—	—	3,123,153	3,123	—	—	497,345	—	500,468
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	347,444	—	347,444
Note to related party shareholder	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(55,000)	—	(55,000)
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(15,933,762)	(15,933,762)
Balance as of December 31, 2016	1,974,430	1,974	1,834,862	1,835	4,496,908	4,497	17,102,578	17,103	17,556,178	17,556	8,978,960	8,979	330,664	331	65,961,593	(84,259,071)	(18,245,203)
Exercise of stock options	—	—	—	—	—	—	—	—	—	—	255,268	255	—	—	86,448	—	86,703
Exercise of warrants	—	—	—	—	—	—	—	—	—	—	20,000	20	—	—	9,980	—	10,000
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	514,092	—	514,092
Repayment of note to related party shareholder	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55,000	—	55,000
Beneficial conversion feature on Convertible Notes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13,041,412	—	13,041,412
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(29,154,240)	(29,154,240)
Balance as of December 31, 2017	1,974,430	\$ 1,974	1,834,862	\$ 1,835	4,496,908	\$ 4,497	17,102,578	\$ 17,103	17,556,178	\$ 17,556	9,254,228	\$ 9,254	330,664	\$ 331	\$79,668,525	\$(113,413,311)	\$(33,692,236)

The accompanying notes are an integral part of these financial statements.

Liquidia Technologies, Inc.
Statements of Cash Flows

	For the year ended December 31,	
	2016	2017
Operating activities		
Net loss	\$ (15,933,762)	\$ (29,154,240)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	347,444	514,092
Depreciation	651,560	931,931
Amortization of discount on long-term debt	—	9,837,985
Non-cash interest expense	—	2,859,102
Derivative fair value adjustment	—	(9,872,990)
Warrant fair value adjustment	—	(2,011,263)
Non-cash rent expense	391,651	233,449
Lease incentive	—	1,981,915
Changes in operating assets and liabilities:		
Accounts and related party receivables	2,527,304	(328,458)
Prepaid expenses and other current assets	1,655,775	25,206
Other non-current assets	(966,104)	(123,249)
Accounts payable	1,313,193	1,872,852
Accrued expenses	575,903	1,985,263
Accrued compensation	892,426	(1,310)
Accrued interest	5,374	(105,036)
Deferred revenue	(5,407,465)	(2,935,603)
Net cash used in operating activities	<u>(13,946,701)</u>	<u>(24,290,354)</u>
Investing activities		
Purchases of property, plant and equipment	(2,885,159)	(2,544,064)
Net cash used in investing activities	<u>(2,885,159)</u>	<u>(2,544,064)</u>
Financing activities		
Principal payments on capital lease obligations	(335,875)	(384,024)
Proceeds from issuance of convertible notes	—	27,388,524
Proceeds from issuance of long-term debt	6,000,000	4,000,000
Principal payments on long-term debt	—	(888,890)
Payments for debt issuance costs	—	(1,397,628)
Proceeds from exercise of stock options and warrants	445,468	96,703
Net cash provided by financing activities	<u>6,109,593</u>	<u>28,814,685</u>
Net increase (decrease) in cash	<u>(10,722,267)</u>	<u>1,980,267</u>
Cash, beginning of period	12,160,979	1,438,712
Cash, end of period	<u>\$ 1,438,712</u>	<u>\$ 3,418,979</u>
Supplemental disclosure of cash flow information		
Cash paid for interest	\$ 92,155	\$ 313,390
Purchase of equipment with capital leases	\$ 69,136	\$ 796,508
Purchase of equipment in accounts payable	\$ 21,486	\$ 144,852
Purchase of build-to-suit asset with deferred financing obligation	\$ —	\$ 1,341,810
Conversion of accrued interest to long-term debt	\$ 8,251	\$ 41,271
Conversion of accrued expenses to debt	\$ 1,500,000	\$ —
Recording of warrant liabilities with corresponding discount on convertible notes	\$ —	\$ 4,474,122
Recording of derivative liabilities with corresponding discount on convertible notes	\$ —	\$ (9,872,990)
Recording of discount on convertible notes as paid-in capital for beneficial conversion feature	\$ —	\$ 12,119,584
Issuance of convertible note for debt issuance costs	\$ —	\$ 442,356
Related party note receivable for stock option exercise	\$ 55,000	\$ —

The accompanying notes are an integral part of these financial statements.

Liquidia Technologies, Inc.

Notes to Financial Statements

December 31, 2016 and 2017

1. Organization and Description of the Business

Liquidia Technologies, Inc. ("Liquidia" or the "Company"), is a late-stage clinical biopharmaceutical company focused on the development and commercialization of human therapeutics using the Company's proprietary PRINT technology to transform the lives of patients. PRINT is a particle engineering platform that enables precise production of uniform drug particles designed to improve the safety, efficacy and performance of a wide range of therapies. The Company is currently focused on the development of two product candidates for which it holds worldwide commercial rights: LIQ861 for the treatment of pulmonary arterial hypertension and LIQ865 for the treatment of local post-operative pain.

The development and commercialization activities are conducted at the Company's headquarters located in Morrisville, North Carolina. The Company was incorporated under the laws of the state of Delaware in 2004.

2. Significant Accounting Policies

Basis of Presentation

The Company's financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Such financial statements reflect all adjustments that are, in management's opinion, necessary to present fairly, in all material respects, the Company's financial position, results of operations and cash flows and are presented in U.S. Dollars. Certain prior period amounts have been reclassified to conform to the current period presentation.

Variable Interest Entities

The Company identifies entities (i) that do not have sufficient equity investment at risk to permit the entity to finance its activities without additional subordinated financial support or (ii) in which the equity investors lack an essential characteristic of a controlling financial interest as variable interest entities ("VIE" or "VIEs"). The Company performs an initial and on-going evaluation of the entities with which the Company has variable interests to determine if any of these entities are VIEs. If an entity is identified as a VIE, the Company performs an assessment to determine whether the Company has both (i) the power to direct activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses from or the right to receive benefits of the VIE that could potentially be significant to the VIE. If both of these criteria are satisfied, the Company is identified as the primary beneficiary of the VIE and the entity must be consolidated.

Envisia Therapeutics Inc.

The Company determined Envisia Therapeutics Inc. ("Envisia") is a VIE. The Company formed Envisia in November 2013 through the issuance of \$25 million of Series A preferred stock of Envisia to investors who at the time were also investors in Liquidia. In addition, at formation, in exchange for 1,000,000 shares of Envisia common stock, the Company granted to Envisia a worldwide, exclusive, royalty-free license to utilize the PRINT technology in specified fields. Envisia's focus is on therapies in ophthalmology and its programs were in the preclinical stage of development when the company was formed. Under the license agreement, any intellectual property advancements by Envisia related to PRINT automatically become licensed to Liquidia under a transferable, fully paid, royalty-free, exclusive, sub-licensable, worldwide license, for use in its respective fields. Immediately subsequent to the formation, pursuant to an obligation to UNC under the UNC Letter Agreement (Note 5), the Company transferred 200,000 shares of Envisia common stock to UNC. The Company's initial investment in the 800,000 shares of Envisia common stock (post transfer of shares to UNC) was recorded at its estimated fair value of \$930,000.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

In May 2015, the Company repurchased the license in the dermatology and articular fields, as defined, from Envisia in exchange for 50,000 shares of its Envisia common stock, reducing the Company's ownership percentage. In March 2017, the license related to the Otic field, along with other intellectual property rights, as defined, was purchased back by the Company from Envisia in exchange for 75,000 shares of its Envisia common stock. The purchase price was based upon prior third-party appraisals. The Company's initial investment in Envisia common stock was recorded at its estimated fair value of \$930,000 as of the formation date. As part of the license agreement entered into between Liquidia and Envisia, any intellectual property advancements by Envisia related to PRINT automatically become licensed to Liquidia under a transferable, fully paid, royalty-free, exclusive, sub-licensable, worldwide license, for use in its respective fields.

In October 2017, Envisia sold its license to the PRINT technology to Aerie Pharmaceuticals, Inc. ("Aerie") for initial consideration of \$25 million in the form of a combination of cash and Aerie common stock, with the potential to earn additional payments subject to achievement of certain product approval milestones. The Company did not receive any proceeds from this transaction at closing.

As of December 31, 2016 and 2017, Liquidia's common equity ownership percentage in Envisia was approximately 77% and 75%, respectively, and its ownership percentage of voting shares was 4.9% and 4.4%, respectively. Although Liquidia's common equity ownership in Envisia was greater than 50%, control did not rest with the Company; however, the Company had the ability to exercise significant influence over operating and financial policies of Envisia and for a limited time had certain management personnel in common with Envisia. The Company does not have the power to direct activities of Envisia that most significantly impact Envisia's economic performance. Envisia has a board that is independent from Liquidia which approves all activities that affect Envisia's performance, such as selling and purchasing of goods or services; selecting, acquiring or disposing of assets; and researching and developing new products or processes. Additionally, the license rights given to Envisia are irrevocable. Accordingly, the Company accounts for Envisia using the equity method.

LQ3 Pharma, Inc.

The Company has determined that LQ3 Pharma, Inc ("LQ3") is a VIE. In July 2014, the Company formed LQ3 through the issuance of \$10 million Series A preferred stock of LQ3 primarily from a single investor who also holds an investment in Liquidia. At the time of the formation of LQ3, the Company granted to LQ3 a worldwide, exclusive, royalty-free license to utilize the PRINT technology in a specified field. LQ3's focus was on field of diseases in the head and neck, leveraging Liquidia's PRINT platform. Following the formation of LQ3, the Company held 900,000 shares of LQ3 common stock after the transfer of 100,000 shares of LQ3 to UNC related to obligations under the UNC Letter Agreement (see Note 5).

As of December 31, 2015, Liquidia's ownership percentage of voting shares was 19.8%. The Company's initial investment in LQ3 common stock was recorded at its estimated fair value of \$157,140 as of the formation date. As part of the license agreement entered into between Liquidia and LQ3, any intellectual property advancements by LQ3 for PRINT revert to Liquidia, to be added to the body of technology licensed to LQ3 in its respective fields.

In February 2016, LQ3 terminated the development of its sole product and, therefore, ceased its operations. LQ3 also relinquished its license to the PRINT technology for a waiver by the Company of any

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

fees or payments related to shared services beyond that which had been billed. As of the date of termination of operations, no amounts were due from LQ3.

As of December 31, 2016 and 2017, Liquidia's common equity ownership percentage was 0%. Although Liquidia's common equity ownership in LQ3 was greater than 50% in prior years, control did not rest with the Company; however, the Company had the ability to exercise significant influence over operating and financial policies. The Company did not have the power to direct activities of LQ3 that most significantly impacted LQ3's economic performance. Additionally, the license rights given to LQ3 were irrevocable. Accordingly, the Company accounted for LQ3 using the equity method.

Envisia and LQ3 reported net losses from operations for all years since inception. As a result of the Company recording its share of losses incurred by each of these investees in their initial year, the Company's investment in each was reduced to \$0 (as of December 31, 2013 for Envisia and December 31, 2014 for LQ3). Envisia and LQ3 reported losses for all subsequent periods, and accordingly, the Company's investment in these entities remained recorded at \$0 for all years presented. The initial investment amounts recorded represent the Company's maximum risk of loss related to these VIEs.

Going Concern

The Company's financial statements have been prepared assuming the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business.

The Company's operations have consisted primarily of developing its technology, developing products, prosecuting its intellectual property and securing financing. The Company has incurred recurring losses and cash outflows from operations, has an accumulated deficit, and has debt maturing within twelve months. The Company expects to continue to incur losses in the foreseeable future and will require additional financial resources to continue to advance its products and intellectual property, in addition to repaying its maturing debt and other obligations.

These circumstances raise substantial doubt about the Company's ability to continue as a going concern. Management's plans with regard to this matter include continuing attempts to obtain additional financing from its current investors and new investors to sustain its operations or to pursue other financing alternatives. However, there is no assurance that the Company will be successful in obtaining sufficient financing on terms acceptable to the Company, and the failure of the Company to obtain sufficient funds on acceptable terms, when needed, could have a material adverse effect on the Company's business, results of operations and financial condition. If sufficient financings are not obtained, this may necessitate other actions by the Company. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Use of Estimates

The preparation of 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 as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual amounts could differ from those estimates.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

Shared Services

Liquidia was party to shared service agreements with Envisia and LQ3, whereby they shared facilities, patent costs, management services and manufacturing in exchange for monetary consideration through June 30, 2016, after which such agreements were terminated.

Equity Method Investments

The Company holds investments in equity method investees. Investments in equity method investees are those for which the Company has the ability to exercise significant influence but does not control and is not the primary beneficiary. Significant influence typically exists if the Company has a 20% or more voting interest in the venture, unless predominant evidence to the contrary exists. Under this method of accounting, the Company records its proportionate share of the net earnings or losses of equity method investees and a corresponding increase or decrease to the investment balances. Cash payments to equity method investees such as additional investments, loans and advances, as well as payments from equity method investees such as dividends, distributions and repayments of loans and advances, are recorded as adjustments to investment balances. The Company evaluates its equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amounts of such investments may not be recoverable.

Cash

The Company considers all highly liquid investments with a maturity of three months or less, when purchased, to be cash equivalents. The Company had no cash equivalents at December 31, 2016 and 2017.

Accounts Receivable

Accounts receivable are stated at historical cost less an allowance for doubtful accounts as of each Balance Sheet date. The Company does not accrue interest on trade receivables. On a periodic basis, the Company evaluates its accounts receivable and establishes an allowance based on its history of collections and write-offs and the current status of all receivables. The Company writes off customer receivables when it becomes apparent, based upon customer facts and circumstances, that such amounts will not be collected.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, accounts receivable and related party receivables. The Company is exposed to credit risk, subject to federal deposit insurance, in the event of default by the financial institutions holding its cash to the extent of amounts recorded on the Balance Sheet. With regards to cash, 100% of the Company's cash is held on deposit with Pacific Western Bank. With regards to revenues and accounts receivable, GlaxoSmithKline ("GSK", "GSK Vaccines" and "GSK Inhaled") accounted for 90% and 84% of the Company's revenues for the years ended December 31, 2016 and 2017, respectively, and 67% and 69% of the Company's accounts receivable as of December 31, 2016 and 2017, respectively.

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)**Property, Plant and Equipment**

Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment is computed using the straight-line method over the estimated useful lives of the assets beginning when the assets are placed in service. Estimated useful lives for the major asset categories are:

Lab equipment	5 - 7 years
Office equipment	5 years
Furniture and fixtures	10 years
Computer equipment	3 years
Leasehold improvements	Lesser of life of the asset or remaining lease term

The Company has entered into grant agreements with governmental agencies to perform defined research activities. Under those grants, the Company purchases lab equipment required to perform the necessary research. Those specific assets are depreciated over the lesser of the useful life of the assets or the effective duration of the grant.

Major renewals and improvements are capitalized to the extent that they increase the useful economic life or increase the expected economic benefit of the underlying asset. Maintenance and repairs are charged to operations as incurred. When items of property, plant and equipment are sold or retired, the related cost and accumulated depreciation or amortization is removed from the accounts, and any gain or loss is included in operating expenses in the accompanying Statements of Operations and Comprehensive Loss.

Impairment of Long-Lived Assets

The Company evaluates long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. If the estimated future cash flows (undiscounted and without interest charges) from the use of an asset are less than the carrying value, a write-down is recorded to reduce the related asset to its estimated fair value. To date, no such write-downs have occurred.

Deferred Rent

Rent expense is recognized on a straight-line basis over the life of the lease. The difference between rent expense recognized and rental payments, as stipulated in the lease, is reflected as deferred rent in the accompanying Balance Sheets and amortized over the life of the lease. In addition, deferred rent also includes landlord incentives on a portion of the leasehold improvement cost, which is amortized over the life of the lease.

Revenue Recognition

The Company follows the revenue-recognition guidance established by Financial Accounting Standards Board, or FASB, ASC Topic 605, *Revenue Recognition*, or ASC 605. In determining the accounting for collaboration agreements, the Company follows the related guidance. Guidance is provided on whether an arrangement that involves multiple revenue-generating activities or deliverables should be divided into separate units of accounting for revenue-recognition purposes and, if division is required, how the arrangement consideration should be allocated among the separate units of accounting. If the arrangement

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

constitutes separate units of accounting according to the separation criteria of the guidance, a revenue-recognition policy must be determined for each unit. If the arrangement constitutes a single unit of accounting, the revenue-recognition policy must be determined for the entire arrangement.

Collaboration research and development revenue is recognized as research is performed and related expenses are incurred. Non-refundable up-front fees, which may include, for example, an initial payment upon effectiveness of the contractual relationship or payment to secure a right for a future license, are recorded as deferred revenue and recognized into revenue on a straight-line basis over the estimated period of the Company's substantive performance obligations. If the Company does not have substantive performance obligations, it recognizes non-refundable up-front fees into revenue over the estimated development period.

Revenue for non-refundable payments based on the achievement of milestone events under collaboration agreements are recognized in accordance with ASC 605-28-50-2(e). Milestone events under the Company's collaboration agreements may include research, development, regulatory or commercialization events. A milestone payment is recognized as revenue when the applicable event is achieved, if the event meets the definition of a milestone and the milestone is determined to be substantive. A milestone event is an event having all of the following characteristics: (1) there is substantive uncertainty regarding achievement of the milestone event at the inception of the arrangement; (2) the event can only be achieved based, in whole or in part, on either the Company's performance or a specific outcome resulting from the Company's performance; and (3) if achieved, the event would result in an additional payment due to the Company. The Company also treats events that can only be achieved based, in whole or in part, on either a third party's performance or a specific outcome resulting from a third party's performance, as milestone events if the criteria of the guidance are otherwise satisfied.

A milestone is considered substantive if it meets all of the following criteria: (a) the payment is commensurate with either the Company's performance to achieve the milestone or with the enhancement of the value of the delivered item; (b) the payment relates solely to past performance; and (c) the payment is reasonable relative to all of the deliverables and payment terms within the arrangement. If any of these conditions is not met, the milestone payment is deferred and recognized on a straight-line basis over a period determined as discussed above.

Grant payments are recognized as grant revenue as the Company performs the work and incurs reimbursable costs in accordance with the objectives of the award.

Segment Data

The Company manages, reports and evaluates its business in the following two segments: Pharmaceutical Products (formerly named Specialty Pharmaceutical) and Partnering and Licensing. The Company's reportable operating segments have been determined in accordance with the Company's internal management structure, which is organized based on operating activities, the manner in which the Company organizes segments for making operating decisions and assessing performance and the availability of separate financial results. Unallocated operations and corporate expenses, such as depreciation, facilities costs, corporate management costs and interest expense, are represented within Corporate / Operations.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

Pharmaceutical Products — The Company utilizes its proprietary PRINT technology to develop novel drug products (such as LIQ861 and LIQ865) based on presently commercialized drug products. The Company has not commenced commercialization of its pharmaceutical drug products and has not recognized any revenues to date. The Company intends to commercialize LIQ861 independently in the United States and intends to evaluate its commercialization and development plans for LIQ865. Revenues from these licensing arrangements would be recognized in this segment. In addition, if LIQ861 or LIQ865 are approved for marketing, the Company expects to recognize any revenues from sales of that product in this segment.

Partnering and Licensing — The Company utilizes its proprietary PRINT technology to enable the development of drug products by other pharmaceutical companies. The Company assists these customers in the development of their drug products through research and development services like particle formulation and manufacturing at market billing rates. The Company also typically receives up-front fees or technology access payments and milestone payments for each phase of clinical achievement. If these drug products achieve commercialization, the Company also expects to be eligible to receive royalties from the sale of their drug products.

For the years ended December 31, 2016 and 2017, the majority of the Company's revenue from collaborating and licensing was derived from two separate agreements with GSK, namely the GSK Vaccines Collaboration and Option Agreement and the GSK Inhaled Collaboration and Option Agreement. The arrangements with GSK accounted for \$11,827,426 and \$6,114,311, representing 90% and 84% of total revenue for the years ended December 31, 2016 and 2017, respectively. This revenue was comprised of billings for research and development services, milestone payments and amortization of deferred revenue from up-front payments.

The Company revised its segment reporting to reflect changes in the way the Chief Operating Decision Maker ("CODM") viewed the business. These changes were in the organizational structure and accountability over certain unallocated and general research and development costs that were not directly related to a particular segment. Further, the Specialty Pharmaceutical segment was renamed the Pharmaceutical Products segment to better reflect its activities. The segment data is reflected below for the years ended December 31, 2016 and 2017, as follows:

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

	2016	2017
Revenues:		
Pharmaceutical Products	\$ —	\$ —
Partnering and Licensing	13,216,989	7,258,123
Total	<u>\$ 13,216,989</u>	<u>\$ 7,258,123</u>
Operating (loss) income:		
Pharmaceutical Products	\$ (15,444,224)	\$ (13,625,296)
Partnering and Licensing	7,672,946	2,303,622
Corporate / Operations	(8,091,525)	(16,706,612)
Total	<u>(15,862,803)</u>	<u>(28,028,286)</u>
Interest income	14,906	268
Interest expense	(85,865)	(13,010,475)
Derivative and warrant fair value adjustments	—	11,884,253
Net loss	<u>\$ (15,933,762)</u>	<u>\$ (29,154,240)</u>

Segment information by asset is not disclosed as it is not reviewed by the CODM or used to allocate resources or to assess the Company's operating results and financial performance. All long-lived assets are domiciled within the United States and all revenues were earned within the United States.

Research and Development Expense

Research and development costs are expensed as incurred and include direct costs incurred to third parties related to the salaries of, and stock-based compensation for, personnel involved in research and development activities, contractor fees, grant expenses, administrative expenses and allocations of research-related overhead costs. Administrative expenses and research-related overhead costs included in research and development expense consist of allocations of facility and equipment lease charges, depreciation and amortization of assets and insurance directly related to research and development activities.

Patent Maintenance

Liquidia is responsible for all patent costs, past and future, associated with the preparation, filing, prosecution, issuance, maintenance, enforcement and defense of United States patent applications. Such costs are recorded as general and administrative expenses as incurred. To the extent that the Company's licensees share these costs, such benefit is recorded as a reduction of the related expenses.

Stock-Based Compensation

The Company accounts for stock-based compensation under the provisions of ASC 718, *Compensation — Stock Compensation* ("ASC 718"), which requires the measurement and recognition of compensation

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

expense for all share-based payment awards made to employees and directors, including employee stock options, based on estimated fair values. ASC 718 requires companies to estimate the fair value of share-based awards on the grant date using an option pricing model. The value of the portion of the award that is ultimately expected to vest is recorded as expense over the requisite service periods in the Company's Statements of Operations and Comprehensive Loss.

The Company accounts for equity instruments issued to nonemployees in accordance with the provisions of ASC 505-50, *Equity-Based Payments to Non-Employees*, under which the stock-based compensation expense is recognized in the financial statements based on their grant date fair values. The Company values equity instruments, stock options and warrants for common stock granted to lenders and consultants using the Black-Scholes option pricing model. The measurement of non-employee stock-based compensation is recognized as an expense over the term of the related financing or the period over which services are received.

Defined Contribution Retirement Plan

The Company maintains a defined contribution 401(k) retirement plan for its employees, pursuant to which employees who have completed sixty days of service may elect to contribute a portion of their compensation on a tax-deferred basis up to the maximum amount permitted by the Internal Revenue Code, as amended. The Company provides a 4% matching contribution to eligible employee contributions. Matching contributions are made subsequent to the year to which they relate. The Company's matching contributions due were \$358,037 and \$377,623 and were included in Accrued Expenses in the accompanying Balance Sheets as of December 31, 2016 and 2017, respectively.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted average number of common shares outstanding during the period.

Diluted net loss per share is computed by dividing net loss by the weighted average number of common shares adjusted for the dilutive effect of common equivalent shares outstanding during the period. Common stock equivalents consist of preferred stock, stock options and stock warrants. Net loss per share attributable to common stockholders is calculated using the two-class method, which is an earnings allocation formula that determines net loss per share for the holders of the Company's common shares and participating securities. The Company's convertible preferred stock contains participating rights in any dividend paid by the Company and are deemed to be participating securities. Net loss attributable to common stockholders and participating preferred shares are allocated to each share on an as-converted basis as if all of the earnings for the period had been distributed. The participating securities do not include a contractual obligation to share in the losses of the Company and are not included in the calculation of net loss per share in the periods that have a net loss. Common equivalent shares are excluded from the computation in periods in which they have an anti-dilutive effect on net loss per share.

Diluted net loss per share is computed using the more dilutive of (a) the two-class method or (b) the if-converted method. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders since dilutive common shares are not assumed to have been

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

issued if their effect is anti-dilutive. Diluted net loss per share is equivalent to basic net loss per share for all years presented herein because common stock equivalent shares from unexercised stock options, outstanding warrants, preferred stock and common shares expected to be issued under the Company's employee stock purchase plan were anti-dilutive. Due to their dilutive effect, the calculation of diluted net loss per share for the years ended December 31, 2016 and 2017 does not include the following common stock equivalent shares:

	<u>2016</u>	<u>2017</u>
Preferred Stock	64,165,785	76,440,945
Stock Options	12,106,088	8,368,728
Warrants	271,746	4,699,565
Total	<u>76,543,619</u>	<u>89,509,238</u>

For the years ended December 31, 2016 and 2017, there were no reconciling items between Basic and Diluted loss per share.

In February 2018, the Company received proceeds of \$25.6 million in exchange for the corresponding sale of Series D Preferred Stock ("Series D") and related rights offering to new and existing investors. The applicable issue price per share for the Series D preferred stock was \$0.59808, subject to adjustment as provided in the certificate of incorporation. In addition, all outstanding convertible notes, plus accrued interest, totalling \$28.9 million were converted into Series D preferred stock at the same price per share without a discount. In total, 91,147,482 shares of Series D preferred stock were issued. These shares are also excluded from the per share calculations since they were not issued prior to the end of the year and they are anti-dilutive.

Fair Value of Financial Instruments

The carrying values of cash, accounts receivable, accounts payable and related party receivables at December 31, 2016 and 2017 approximated fair value due to the short maturity of these instruments.

The Company's valuation of financial instruments is based on a three-tiered approach, which requires that fair value measurements be classified and disclosed in one of three tiers. The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

Level 1 — Quoted prices in active markets for identical assets or liabilities;

Level 2 — Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly; and

Level 3 — Unobservable inputs for the asset and liability used to measure fair value, to the extent that observable inputs are not available.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The following tables present the placement in the fair value hierarchy of financial instruments measured at fair value as of December 31, 2016 and 2017:

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Carrying Value
December 31, 2016				
Pacific Western Bank Tranche I note	\$ —	\$ 2,998,267	\$ —	\$ 3,000,000
Pacific Western Bank Tranche II note	—	2,995,536	—	3,000,000
UNC promissory note	—	2,216,337	—	2,216,337
Total	\$ —	\$ 8,210,140	\$ —	\$ 8,216,337

	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Carrying Value
December 31, 2017				
Pacific Western Bank Tranche I note	\$ —	\$ 2,512,301	\$ —	\$ 2,488,572
Pacific Western Bank Tranche II note	—	2,845,194	—	2,820,382
Pacific Western Bank Tranche III note	—	3,793,644	—	3,760,509
UNC promissory note	—	2,257,684	—	2,257,684
Convertible notes	—	—	28,702,268	9,837,984
Warrant liabilities	—	—	2,462,859	2,462,859
Total	\$ —	\$ 11,408,823	\$ 31,165,127	\$ 23,627,990

The fair value of debt was measured as the present value of the respective future cash outflows discounted at a current interest rate as of the year-end date, taking into account the remaining term of liabilities.

Convertible Instruments

The Company has utilized various types of financing to fund its business needs, including convertible debt and convertible preferred stock, in some cases with corresponding warrants. The Company considered guidance within FASB ASC 470-20, *Debt with Conversion and Other Options*, ("ASC 470-20"), ASC 480, *Distinguishing Liabilities from Equity* ("ASC 480") and ASC 815, *Derivatives and Hedging* ("ASC 815"), when accounting for the issuance of convertible securities. Additionally, the Company reviews the instruments to determine whether they are freestanding or contain an embedded derivative and, if so, whether they should be classified in permanent equity, mezzanine equity or as a liability at each reporting period until the amount is settled and reclassified into equity.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

When multiple instruments are issued in a single transaction, the Company allocates total proceeds from the transaction among the individual freestanding instruments identified. The allocation is made after identifying all the freestanding instruments and the subsequent measurement basis for those instruments. The subsequent measurement basis determines how the proceeds are allocated. Generally, proceeds are allocated based on one of the following methods:

- § Fair value method — The instrument being analyzed is allocated a portion of the proceeds equal to its fair value, with the remaining proceeds allocated to the other instruments as appropriate.
- § Relative fair value method — The instrument being analyzed is allocated a portion of the proceeds based on the proportion of its fair value to the sum of the fair values of all the instruments covered in the allocation.
- § Residual value method — The instrument being analyzed is allocated the remaining proceeds after an allocation is made to all other instruments covered in the allocation.

Generally, when there are multiple instruments issued in a single transaction that have different subsequent measurement bases, the proceeds from the transaction are first allocated to the instrument that is subsequently measured at fair value (i.e., instruments accounted for as a derivative liabilities) at its issuance date fair value, with the residual proceeds allocated to the instrument not subsequently measured at fair value. In the event both instruments in the transaction are not subsequently measured at fair value (i.e., equity-classified instruments), the proceeds from the transaction are allocated to the freestanding instruments based on their respective fair values, using the relative fair value method.

After the proceeds are allocated to the freestanding instruments, resulting in an initial discount on the host contract, those instruments are further evaluated for embedded features (i.e., conversion options) that require bifurcation and separate accounting as a derivative financial instrument pursuant to ASC 815. Embedded derivatives are initially and subsequently measured at fair value. Under ASC 815, a portion of the proceeds received upon the issuance of the hybrid contract is allocated to the fair value of the derivative.

The Company accounts for convertible instruments in which it is determined that the embedded conversion options should not be bifurcated from their host instruments in accordance with ASC 470-20. Under ASC 470-20, the Company records, when necessary, discounts to convertible notes or convertible preferred stock for the intrinsic value of conversion options embedded in the convertible instruments based upon the differences between the fair value of the underlying common stock at the commitment date of the transaction and the effective conversion price embedded in the convertible instrument, unless limited by the proceeds allocated to such instrument.

Warrant Liabilities

The Company has classified warrants to purchase shares of Series C-1 preferred stock as a liabilities on its Balance Sheets as these warrants were free-standing financial instruments that will require the Company to issue convertible securities upon exercise. The warrants were initially recorded at fair value on date of grant, and they will be subsequently remeasured to fair value at each reporting period. Changes in fair value of the warrants are recognized as a component of other income (expense) in the Statements of Operations and Comprehensive Loss. The Company will continue to adjust the liabilities for changes in fair value at each reporting period until the warrant liabilities are settled. Following an Initial Public Offering ("IPO") and the

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

conversion of preferred stock into common stock, the Company will no longer include the warrant liabilities on the Balance Sheet or recognize changes in their fair value on the Statements of Operations and Comprehensive Loss.

The Company used the Black-Scholes option pricing model, which incorporates assumptions and estimates, to value the preferred stock warrants. The Company assessed these assumptions and estimates on a quarterly basis as additional information impacting the assumptions was obtained. Estimates and assumptions impacting the fair value measurement included the fair value per share of the underlying Series C-1 preferred stock, the remaining contractual term of the warrant, the risk-free interest rate, the expected dividend yield and the expected volatility of the price of the underlying preferred stock. The Company determined the fair value per share of the underlying preferred stock by taking into consideration the most recent sales of its convertible preferred stock, results obtained from third-party valuations and additional factors that were deemed relevant. The Company estimated its expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrant. The risk-free interest rate was determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrant. Expected dividend yield was based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

Embedded Derivatives

Embedded derivatives that are required to be bifurcated from the underlying instrument are accounted for and valued as a separate financial instrument. In conjunction with the Company's Convertible Instruments, embedded derivatives exist associated with the future consummation of a qualified financing event, as defined, and a subsequent discounted conversion of the instrument to capital stock. The embedded derivatives are bifurcated and classified as derivative liabilities on the Balance Sheets and separately adjusted to their fair values at the end of each reporting period. Changes in fair values of the derivative liabilities are recognized as a component of other income (expense) in the Statements of Operations and Comprehensive Loss.

Issuance Costs Related to Equity and Debt

The Company allocates issuance costs between the individual freestanding instruments identified on the same basis as proceeds were allocated. Issuance costs associated with the issuance of stock or equity contracts (i.e., equity-classified warrants and convertible preferred stock) are recorded as a charge against the gross proceeds of the offering. Any issuance costs associated with the issuance of liability-classified warrants are expensed as incurred. Issuance costs associated with the issuance of debt (i.e., convertible debt) is recorded as a direct reduction of the carrying amount of the debt liability, but limited to the notional value of the debt. The Company accounts for debt as liabilities measured at amortized cost and amortizes the resulting debt discount to interest expense using the straight-line method over the expected term of the notes pursuant to ASC 835, *Interest* ("ASC 835"). To the extent that the reduction from issuance costs of the carrying amount of the debt liability would reduce the carrying amount below zero, such excess is recorded as interest expense.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

Income Taxes

The asset and liability method is used in the Company's accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The Company records a valuation allowance against deferred tax assets when realization of the tax benefit is uncertain.

A valuation allowance is recorded, if necessary, to reduce net deferred taxes to their realizable values if management does not believe it is more likely than not that the net deferred tax assets will be realized.

The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"). The FASB issued ASU 2014-09 to clarify the principles for recognizing revenue and to develop a common revenue standard for U.S. GAAP. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes the most current revenue recognition guidance. This guidance was originally effective for annual periods and interim periods within those annual periods beginning after December 15, 2016 and early adoption was not permitted. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606) — Deferral of the Effective Date* ("ASU 2015-14"), which deferred the effective date of the guidance in ASU 2014-09 by one year to December 15, 2017 for interim and annual reporting periods beginning after that date and permitted early adoption of the standard, but not before the original effective date of December 15, 2016. This standard will be effective for the Company for the year ending December 31, 2018. In 2016, the FASB clarified the implementation guidance on principal versus agent, identifying performance obligations, licensing, narrow-scope improvements, practical expedients, and to expedite improvements to 2014-09 by issuing ASU 2016-08, *Revenue from Contracts with Customers (Topic 606) — Principal versus Agent Considerations* ("ASU 2016-08"), ASU 2016-10, *Revenue from Contracts with Customers (Topic 606) — Identifying Performance Obligations and Licensing* ("ASU 2016-10"), ASU 2016-12, *Revenue from Contracts with Customers (Topic 606) — Narrow-Scope Improvements and Practical Expedients* ("ASU 2016-12"), and ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers* ("ASU 2016-20"). The Company will adopt this standard as of January 1, 2018 and will apply the modified retrospective method. Under this adoption method, the Company will record a cumulative adjustment to retained earnings at January 1, 2018 and apply the provisions of the ASU prospectively. The Company believes this ASU will have an impact on, but not limited to, how it identifies performance obligations for its collaborative agreements and accounts for non-refundable milestones and up-front payments. This ASU will also require new comprehensive disclosures about contracts with customers, including the significant judgments the Company has made when applying the ASU. The Company has engaged a third party specialist to assist in determining the impact and application of the ASU and management is in the process of assessing the results. The Company will finalize its accounting assessment and quantitative impact of the adoption during the first quarter of fiscal year 2018, as required.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements — Going Concern* (Subtopic 205-40) in which management should evaluate whether there are conditions or events, considered in the aggregate, that raise 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 (or within one year after the date that the financial statements are available to be issued when applicable). When management identifies conditions or events that raise substantial doubt about an entity's ability to continue as a going concern, management should assess whether its plans that are intended to mitigate those relevant conditions or events will alleviate the substantial doubt. This update is effective for annual periods ending after December 15, 2016, and early application is permitted for any annual or interim period thereafter. The Company adopted this standard effective as of January 1, 2016. Refer to Note 2 for the related disclosure.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments — Overall* (Subtopic 825-10) — *Recognition and Measurement of Financial Assets and Financial Liabilities* ("ASU 2016-01"). The provisions of ASU 2016-01 make targeted improvements to enhance the reporting model for financial instruments to provide users of financial statements with more useful information, including certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The guidance is effective for public companies with annual periods and interim periods within those annual periods beginning after December 15, 2017, and is expected to be effective for the Company for the year ending December 31, 2018. The Company will be adopting this standard for the year ending December 31, 2018. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842) ("ASU 2016-02"). The provisions of ASU 2016-02 set out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. The new 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. 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. Leases with a term of 12 months or less will be accounted for in a similar manner as under existing guidance for operating leases. ASU 2016-02 supersedes the previous lease standard, Topic 840, *Leases*. The guidance is effective for public companies with annual periods and interim periods within those annual periods beginning after December 15, 2018, and is expected to be effective for the Company for the year ending December 31, 2019. The Company is currently evaluating the impact that the implementation of this standard will have on the Company's financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Stock Compensation* (Topic 718), which includes provisions intended to simplify various aspects related to how share-based payments are accounted for and presented in the financial statements. The standard is effective for annual periods beginning after December 15, 2016. During the first quarter of 2017, the Company adopted this ASU. The key effects of the adoption on the Company's financial statements include that the Company will now recognize windfall tax benefits as deferred tax assets instead of tracking the windfall pool and recording such benefits in equity. Additionally, the Company has elected to continue to estimate forfeitures at the time of grant rather than as they occur. Adoption of this standard did not have a material impact on our financial statements.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

2. Significant Accounting Policies (Continued)

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230) — Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). The provisions of ASU 2016-15 address eight specific cash flow issues and how those certain cash receipts and cash payments are presented and classified in the statement of cash flows under Topic 230, *Statement of Cash Flows*, and other Topics. The guidance is effective for public companies with annual periods and interim periods within those annual periods beginning after December 15, 2017, with early adoption permitted, and is expected to be effective for the Company for the year ending December 31, 2018. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*, which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. The standard is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. The adoption of this standard is not expected to have a material impact on the Company's financial statements.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; 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*. Part I of this update addresses the complexity of accounting for certain financial instruments with "down round" features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Part II of this update addresses the difficulty of navigating Topic 480, *Distinguishing Liabilities from Equity*, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable noncontrolling interests. The amendments in Part II of this update do not have an accounting effect. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. The Company is evaluating the effect that ASU 2017-11 will have on its financial statements and related disclosures.

3. Common and Preferred Stock

Authorized Capital

As of December 31, 2017, in connection with the issuances of convertible notes during 2017, the authorized capital was increased to 291,862,857 shares of capital stock, \$0.001 par value per share, of which 175,000,000 shares were designated as Class A voting common stock ("Class A"), 330,664 shares were designated as Class B nonvoting common stock ("Class B") and 116,531,993 shares were designated as preferred stock. Of the designated preferred stock, 1,974,430 shares were designated as Series A Preferred Stock ("Series A"), 1,834,862 shares were designated as Series A-1 Preferred Stock ("Series A-1"), 4,620,123 shares were designated as Series B Preferred Stock ("Series B"),

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

3. Common and Preferred Stock (Continued)

17,102,578 shares were designated as Series C Preferred Stock ("Series C") and 91,000,000 shares were designated as Series C-1 Preferred Stock ("Series C-1").

In June 2015, the Board approved an extension of the term of the Liquidia Technologies, Inc. Stock Option Plan (the "2004 Plan") by two additional years and an expansion of the pool of available shares by 5,000,000 shares, of which 3,374,000 were approved for grant to existing management. The Company had reserved a total of 18,299,642 shares of Class A Voting common stock for issuance under the 2004 Plan.

In May 2016, the Board approved a new second stock option plan (the "2016 Plan"). The option pool of shares available to issue under the 2016 Plan was established as 1,400,000 shares. Of this amount, 524,887 shares are available for future stock option grants as of December 31, 2017.

In January and February 2017, the Company entered into a series of Convertible Note and Warrant Purchase Agreements and issued an aggregate total of \$11.8 million in principal amount of unsecured convertible promissory notes (the "January and February Notes") bearing interest at a rate of 8% per annum with a maturity date of December 31, 2018 (amended from June 30, 2018 in May 2017). This financing included warrants to purchase a total of 3,698,128 shares of the Company's Series C-1 Preferred Stock. The January and February Notes were issued to current and new stockholders of the Company. Since this transaction contained equity and debt components, a fair value measurement of the financial instruments that represent additional obligations was conducted. The fair value of the warrants and other embedded financial instruments as of the date of issuance of the convertible promissory notes are recorded separately from the underlying convertible notes (see Note 11).

In July 2017, the Company entered into a series of unsecured convertible note agreements of \$10.4 million in the aggregate (the "July Notes"). The July Notes bear interest at a rate of 8% per annum with a maturity date of December 31, 2018. Principal plus accrued interest convert into either preferred or common stock at the time of a qualified financing, as defined, at a discount to the share price, depending on the financing. In conjunction with the July Notes, the Company also entered into a commitment with an advisor in the form of a convertible note amounting to \$442,356 with terms similar to the related transaction, which is included in the aggregate amount of July Notes.

In November 2017, the Company issued a series of unsecured subordinated convertible notes with an aggregate principal amount of \$5.2 million to new investors (the "November Notes"). The November Notes bear interest at a rate of 8% per annum with a maturity date of December 31, 2018. Principal plus accrued interest convert into either preferred or common stock at the time of a qualified financing, as defined, at a discount to the share price, depending on the type of financing.

In February 2018, the Company received proceeds of \$25.6 million in exchange for the corresponding sale of Series D Preferred Stock ("Series D") and related rights offering to new and existing investors. The applicable issue price per share for the Series D preferred stock was \$0.59808, subject to adjustment as provided in the certificate of incorporation. In addition, all outstanding convertible notes, plus accrued interest, totalling \$28.9 million were converted into Series D preferred stock at the same price per share without a discount. In total, 91,147,482 shares of Series D preferred stock were issued. Each share of Series D preferred stock is voting and is convertible at any time into a share of Class A voting common stock with such conversion ratio subject to future adjustment. Conversion is automatic upon a qualified financing, as defined. Each series of preferred stock has anti-dilution protection in the event of a dilutive

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

3. Common and Preferred Stock (Continued)

issuance, as defined in the certificate of incorporation. The Series D stock bears an 8% per annum noncumulative dividend (\$0.0478 per Series D preferred share) when and if declared. The Series D has a liquidation preference equal to the aggregate of the proceeds and the note conversions, or \$54.5 million plus accrued but unpaid dividends, after which holders of Series D participate with all other stockholders in the remainder of liquidation proceeds on an as converted basis. The Series D is senior to all other series of preferred stock.

In conjunction with the Series D financing, the authorized capital was increased such that following this financing, the Company is authorized to issue 449,540,280 shares of capital stock, \$0.001 par value per share, of which 265,000,000 shares are designated as Class A, 330,664 shares are designated as Class B and 184,209,616 are designated as preferred stock, of which 1,974,430 shares are designated as Series A, 1,834,862 shares are designated as Series A-1, 4,620,123 shares are designated as Series B, 17,102,578 shares are designated as Series C, 21,254,306 shares are designated as Series C-1, and 137,423,317 shares are designated as Series D.

Common Stock

Upon any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, the holders of the Class A voting common stock shall be entitled to receive that portion of the remaining funds to be distributed to the stockholders, subject to the liquidation preferences of the preferred stock, on a pro-rata basis with the holders of the Class B nonvoting common stock. Such funds shall be paid to the holders of the Class A voting common stock and Class B nonvoting common stock on the basis of the number of shares so held by each of them.

The Class B nonvoting common stock has mandatory conversion provisions (one-for-one) into Class A voting common stock, as declared by the Board of Directors and approved by the holders of a majority of the then issued and outstanding shares of Class A voting common stock, or immediately prior to an IPO.

Preferred Stock

The following summarizes the significant terms of existing Preferred Stock as of December 31, 2017:

Each share of preferred stock is voting and is convertible at any time into voting common stock at the applicable conversion ratio. Conversion is automatic upon the earlier of a qualified financing, such as an IPO of at least \$35 million and a price per share that exceeds \$0.71767 pursuant to a registration statement on Form S-1 under the Securities Act of 1933, as amended, or upon the vote of a majority of the outstanding Series C and C-1 preferred stock on an as-if-converted basis to Class A common stock. Each series of preferred stock has anti-dilution protection in the event of a dilutive issuance, as defined in the certificate of incorporation. As a result of prior anti-dilution adjustments, the conversion ratio for the Series A, Series A-1, Series B, Series C and Series C-1 preferred stock was adjusted to 1.4814-for-1, 2.1351-for-1, 2.1913-for-1, 2.0058-for-1, and 1.0942-for-1, respectively, as of December 31, 2017. As a result of the Series D financing in February 2018, the conversion ratios were modified for anti-dilution adjustments such that the conversion ratio for the Series A, Series A-1, Series B, Series C and Series C-1 preferred stock was adjusted to 1.6087 for 1, 2.3185 for 1, 2.3795 for 1, 2.1781 for 1, and 1.1882-for-1, respectively. The conversion ratio for Series D was 1 for 1 at the time of closing.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

3. Common and Preferred Stock (Continued)

Each series of preferred stock bears an 8% per annum noncumulative dividend when and if declared, or \$0.1064 per Series A preferred share, \$0.2616 per Series A-1 preferred share, \$0.2847 per Series B preferred share, \$0.1169 per Series C preferred share, \$0.0638 per Series C-1 preferred share, and \$0.0478 per Series D preferred share. Through December 31, 2017, no dividends have been declared on any preferred stock nor have any been accrued. Each series of preferred stock has a liquidation preference to the holders of common stock equal to the original purchase price plus declared but unpaid dividends. The Series D preferred stock is senior to all other series of preferred stock. The Series C and C-1 preferred stock, on a pari passu basis, are senior to the Series B, Series A and Series A-1 preferred stock. The Series B preferred stock is senior to the Series A and Series A-1 preferred stock, and the Series A-1 preferred stock is senior to the Series A preferred stock. Following payment of the liquidation preference, remaining proceeds are shared ratably between the common stockholders and the Series A, Series A-1, Series B, Series C and Series C-1 preferred stockholders on an as-converted basis until the holders of the Series A, Series A-1, Series B, Series C and Series C-1 preferred stockholders have received two times the applicable issue price plus accrued but unpaid dividends. The applicable issue price for the Series A, Series A-1, Series B, Series C and Series C-1 preferred stock is \$1.33, \$3.27, \$3.558, \$1.46177 and \$0.79744, respectively, subject to adjustment as defined in the certificate of incorporation. The aggregate liquidation preferences of the Series A, Series A-1, Series B, Series C and Series C-1 preferred stock totaled \$2,625,992, \$6,000,000, \$16,000,000, \$25,000,035 and \$14,000,000 at December 31, 2017, respectively. The liquidation preference of Series D is \$54,513,495.

Warrants

In connection with historical private placement offerings, the Company issued warrants to purchase its preferred stock with an exercise term of ten years from the date of issuance. Pursuant to the terms of the warrants, upon the conversion of the preferred stock underlying the warrant into common stock, the warrants automatically become exercisable for common stock based upon the conversion ratio of the underlying preferred stock. At December 31, 2017, the Company had 123,215 share purchase warrants outstanding for Series B Preferred stock with an exercise price of \$3.56 per share expiring March 28, 2018.

The warrants for 123,215 shares of Series B preferred stock convert into warrants for 293,951 shares of Class A common stock at the same time as all outstanding Series B preferred shares have been converted to Class A common stock. During the year ended December 31, 2017, 20,000 warrants were exercised for the purchase of common stock for total proceeds of \$10,000. The Company did not record any stock-based compensation expense pertaining to the warrants during the years ended December 31, 2016 and 2017. All outstanding warrants are currently exercisable.

The January and February Notes financing included warrants to purchase a total of 3,698,128 shares of the Company's Series C-1 preferred stock at an initial exercise price of \$.79744 per share, subject to adjustments related to achieving future financing milestones, as defined. As of December 31, 2017, the warrants for 3,698,128 shares of Series C-1 preferred stock convert into warrants for 4,405,614 shares of Class A common stock at the same time as all outstanding Series C-1 preferred shares have been converted to Class A common stock. In August 2017, as a result of the financing milestones not being achieved, the exercise price of the Series C-1 warrants was reduced to \$0.001 per share.

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

3. Common and Preferred Stock (Continued)

The Series C-1 and Series B convertible preferred stock will automatically convert into common stock immediately prior to the closing of an IPO of the Company's stock, if such warrants have not previously expired.

4. Stock Options

In November 2004, the Board of Directors adopted, and the stockholders approved, the Plan to create an additional incentive for employees, directors, consultants and advisors. The Plan authorized the issuance of stock options to be granted as incentive stock options along with nonqualified stock options, restricted stock and other stock-based awards. The Board of Directors determines the exercise price of all options granted. The options vest based on terms provided for in the individual stock option agreements issued pursuant to the 2004 Plan. Options generally vest on a monthly basis over a period of up to 4 years and have a contractual life of ten years. The 2016 Plan is the successor to the 2004 Plan. The terms of the 2016 Plan are similar to the 2004 Plan. The 2016 Plan provides for accelerated vesting under certain change of control transactions.

Determining the appropriate fair value model and the related assumptions requires judgment. The fair value of each option grant is estimated using a Black-Scholes option pricing model. The following table summarizes the assumptions used for estimating the fair value of stock options granted during:

	Year Ended December 31,	
	2016	2017
Expected dividend yield	0%	0%
Risk-free interest rate	1.34% - 2.013%	1.344% - 1.988%
Volatility	72% - 98%	69% - 100%
Expected life	6.25 years	6.25 years
Weighted-average fair value per share	\$0.29	\$0.83

The Company considers many factors when estimating expected forfeitures, including the employee or consultant class and historical experience. The Company does not maintain an internal market for its shares, and its shares are not traded privately or publicly. Therefore, the Company estimates volatility based upon the identification of similar public entities for which option price information is available to consider the historical, expected or implied volatility of those entities' share prices in estimating the Company's expected volatility. The expected term of options and warrants granted represents the period that options and warrants granted are expected to be outstanding. The risk-free interest rate for periods within the contractual life of the option and warrant is based on the yield of the U.S. Treasury securities at the time of grant. The Company amortizes the fair value, net of estimated forfeitures, over the remaining vesting term on a straight-line basis.

The weighted-average grant date price per share was \$0.40 and \$1.21 per share for the shares issued during the years ended December 31, 2016 and 2017, respectively.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

4. Stock Options (Continued)

The intrinsic value of options exercised was \$592,521 and \$222,172 for the years ended December 31, 2016 and 2017, respectively. At December 31, 2017, the intrinsic value of options and warrants outstanding and exercisable was \$655,709. The weighted average remaining contractual term of options and warrants outstanding and exercisable is 5.89 years as of December 31, 2017.

The following table summarizes stock option activity under the 2004 Plan and the 2016 Plan:

	Shares Available for Issuance	Options Outstanding	Weighted Average Exercise Price
Outstanding at December 31, 2015	716,040	14,275,613	\$ 0.23
Shares reserved for future issuance	1,149,475	—	—
Granted	(1,513,373)	1,513,373	\$ 0.40
Exercised	—	(3,123,153)	\$ 0.16
Cancelled/expired	409,745	(409,745)	\$ 0.28
Outstanding at December 31, 2016	761,887	12,256,088	\$ 0.26
Shares reserved for future issuance	—	—	—
Granted	(237,000)	237,000	\$ 1.21
Exercised	—	(255,268)	\$ 0.34
Cancelled/expired	—	(991,835)	\$ 0.13
Outstanding at December 31, 2017	<u>524,887</u>	<u>11,245,985</u>	<u>\$ 0.27</u>

The following summarizes certain information about stock options vested and expected to vest as of December 31, 2017:

	Number of Options	Weighted- Average Remaining Contractual Life (In Years)	Weighted-Average Exercise Price
Outstanding and expected to vest	10,714,531	5.89	\$ 0.27
Vested and exercisable	8,459,019	5.03	\$ 0.27

During the year ended December 31, 2016, 3,123,153 stock options were exercised for the purchase of common stock for total proceeds of \$500,468. The intrinsic value for the options exercised approximated \$592,521. During the year ended December 31, 2017, 255,268 stock options were exercised for the purchase of common stock for total proceeds of \$86,703. The intrinsic value for the options exercised was \$222,172.

During 2016 and 2017, stock-based compensation expense for employee stock option awards totaled \$347,444 and \$514,092, respectively. As of December 31, 2017, there was \$968,372 of total unrecognized compensation cost related to non-vested stock option grants, which is expected to be recognized over a weighted-average period of 1.60 years.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

5. License Agreements

Liquidia performs research under a license agreement with the UNC as amended to date, ("UNC Letter Agreement"). As part of the UNC Letter Agreement, Liquidia holds an exclusive license to certain research and development technologies and processes in various stages of patent pursuit, for use in its research and development and commercial activities, with a term until the expiration date of the last to expire patent subject to the UNC Letter Agreement, subject to industry standard diligence milestones. Under the UNC Letter Agreement, Liquidia is obligated to pay UNC royalties equal to a low single-digit percentage of all net sales of Liquidia drug products whose manufacture, use or sale includes any use of the technology or patent rights covered by the UNC Letter Agreement. Liquidia may grant sublicenses of UNC licensed intellectual property in return for specified payments based on a percentage of any fee, royalty or other consideration received.

In connection with the development and collaboration agreements (see Note 6) entered into with GSK in June 2012, Liquidia paid sublicense fees to UNC and amortized each into research and development expense over the period of specific performance with GSK. Also in connection with that sublicense fee, Liquidia agreed to issue \$1,200,000 of Series C-1 preferred shares to UNC under the same terms provided to other Series C-1 holders and an unsecured promissory note for \$600,000. Refer to Note 11 for additional details on the unsecured promissory note.

In 2012 and 2015, GSK Vaccines and GSK Inhaled made up-front payments to the Company of \$14,000,000 and \$20,000,000 combined, respectively. On such payments, the Company incurred sublicense fees to UNC of \$2,800,000 and \$2,500,000, respectively, which are being amortized into Cost of Sales in the accompanying Statements of Operations and Comprehensive Loss on a straight-line basis over the corresponding periods of revenue recognition of the related payments. As of December 31, 2016, the balances of these unamortized fees included in current and long-term prepaid expenses and other assets was \$319,758 and \$872,488, respectively. As of December 31, 2017, the balances of these unamortized fees included in current and long term prepaid expenses and other assets was \$319,758 and \$552,730, respectively.

In June 2016, Liquidia entered into an amendment to the UNC Letter Agreement, whereby the date for completion of a milestone requiring launch of a commercial product was extended from January 1, 2018 to December 31, 2020. In addition, a 2016 letter agreement was accepted by UNC that detailed Liquidia's efforts in satisfying the obligations of two milestones related to developing and commercializing the licensed technology under the UNC Letter Agreement as of December 31, 2015, and accepted such efforts as satisfying the two milestones dated January 1, 2016. The 2016 letter agreement also included extending the maturity date of the promissory note (see Note 11) to December 31, 2017 and payment of an additional \$1,500,000 fee in exchange for modifying these progress milestones required under the UNC Letter Agreement. Even though this amount was added to the outstanding balance of the promissory note in 2016, for the year ended December 31, 2015, the Company accrued the \$1,500,000 in research and development expense. In December 2017, the Company executed an amendment to the UNC Letter Agreement that extends the maturity date of the promissory note from December 31, 2017 to June 30, 2018.

6. Revenue From License and Collaboration Agreements

The Company's collaboration and licensing agreements provide for multiple deliverables to be delivered by the Company and include a license to the Company's technology in a particular field of study, participation

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

6. Revenue From License and Collaboration Agreements (Continued)

in collaboration committees, performance of certain research and development services and obligations for certain manufacturing services. Up-front consideration related to the licensing of technology is recognized over the estimated period of the Company's substantive performance obligations.

The Company recognizes the payments received for research and development services in the period when the services are performed and collection is reasonably assured. Royalties related to product sales will be recognized when earned since payments relate directly to products that have been fully developed and for which the Company has satisfied all of its obligations.

The following tables summarize the amounts recorded as revenue in the Statements of Operations and Comprehensive Loss for each significant collaboration and licensing agreement for the years ended December 31, 2016 and 2017:

	2016 Revenue Recognized From			
	Non-Refundable Payments			
	Milestones	Up-front Payments	Research and Development Services	Total
GSK Vaccines	\$ —	\$ 1,538,465	\$ 1,347,369	\$ 2,885,834
GSK Inhaled	3,000,000	3,000,000	2,941,592	8,941,592
Gates Foundation	—	145,631	—	145,631
Other	—	110,868	1,133,064	1,243,932
Total	\$ 3,000,000	\$ 4,794,964	\$ 5,422,025	\$ 13,216,989

	2017 Revenue Recognized From			
	Non-Refundable Payments			
	Milestones	Up-front Payments	Research and Development Services	Total
GSK Vaccines	\$ —	\$ —	\$ —	\$ —
GSK Inhaled	—	3,000,000	3,114,311	6,114,311
Gates Foundation	—	145,631	—	145,631
Other	—	197,585	800,596	998,181
Total	\$ —	\$ 3,343,216	\$ 3,914,907	\$ 7,258,123

GSK Vaccines

In June 2012, the Company entered into a Development and Collaboration Agreement (the "Collaboration Agreement") with GSK Vaccines, which is based in Belgium. In connection with the Collaboration

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

6. Revenue From License and Collaboration Agreements (Continued)

Agreement, GSK Vaccines received an exclusive worldwide license of Liquidia's rights to certain substrate technology in a specific biotechnological field. In addition, the Collaboration Agreement included material supply provisions for which the Company received reimbursement payments for research and development services provided and manufacturing services for Company materials provided to GSK Vaccines during the Collaboration Agreement. The initial term of the Collaboration Agreement was three years.

In March 2015, GSK Vaccines extended the Collaboration Agreement through April 30, 2016 for up-front consideration to Liquidia of \$5,000,000. Also during 2014 and 2015, the Company entered into other agreements under the collaboration, primarily for research services. In April 2016, GSK Vaccines did not extend this collaboration or exercise their option for a license.

GSK Inhaled

In June 2012, the Company entered into a collaboration, as well as a license option and equity agreement, with GSK Inhaled, which is based in the United Kingdom. The agreements included up-front payments for option license rights to certain life science fields, research and development and manufacturing funding amounting to \$14,000,000 for up to three years, and key license terms, including extension and license fees, milestone payments and royalties on product sales. The Company recognized the non-refundable up-front fees into revenue over three years, in line with the term of the original agreement. In 2012, in connection with GSK's interest in the Company's technology, GSK invested \$3,799,999 in a Series C-1 preferred stock financing.

In September 2015, GSK Inhaled exercised the option to permanently license the technology for a non-refundable payment to the Company of \$15,000,000. The Company is recognizing the non-refundable up-front fees into revenue over five years based on the estimated development period. Pursuant to the license provisions of the collaboration agreement, GSK Inhaled is potentially required to pay Liquidia for certain milestones reached in the aggregate maximum amount of \$158,000,000, and GSK Inhaled is required to pay Liquidia tiered royalties on the worldwide sales of the licensed products at percentages in the mid-single digits, based on net revenues from nonproprietary and proprietary products. Also during 2014 and 2015, the Company entered into other agreements under this collaboration, primarily for research services.

In December 2017, GSK Inhaled made the Company aware of its modified plans under the GSK Inhaled Collaboration and Option Agreement, and the reduced requirement and budget for Liquidia support, commensurate with its research and development plans related to PRINT for 2018. As a result, in December 2017, the Company committed to a plan to reduce its workforce which was communicated to the workforce in January 2018. The expense resulting from this plan is approximately \$400,000, for which \$0 was accrued in the Balance Sheets as of December 31, 2017.

Gates Foundation

In February 2011, the Company entered into a collaboration agreement with the Bill & Melinda Gates Foundation, primarily for research services related to developing vaccines targeted at developing markets. The Company is recognizing the up-front fee into revenue over the 6.75 year term of the agreement.

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

6. Revenue From License and Collaboration Agreements (Continued)**Other:****G&W Laboratories**

In June 2016, the Company entered into a development and license agreement with G&W Laboratories to develop multiple products for topical delivery in dermatology using the Company's PRINT technology. The first non-refundable up-front fee of \$1,000,000 was received in June 2016. This up-front fee was deferred and is being amortized into revenue over a period of five years, expected to correspond with the collaboration term. Research and development services commenced in July 2016 on the first program pursuant to this agreement.

Governmental Grant Awards

Income received from governmental grant awards are recognized as revenue under a cost-plus-fixed fee ("cost-plus") contract which provides for payment of a negotiated fee that is fixed at the inception of the contract. Grants are typically multi-year and the fees may be changed as a result of changes in the scope of work to be performed. Revenue on cost-plus contracts are recognized as costs are incurred at amounts billable to the organization. Revenue from governmental grant awards for the years ended December 31, 2016 and 2017 was \$472,363 and \$235,858, respectively.

7. Property, Plant and Equipment

Property, plant and equipment consisted of the following at December 31, 2016 and 2017:

	2016	2017
Lab equipment	\$ 3,384,149	\$ 3,847,546
Grant equipment	1,115,044	1,143,701
Office equipment	111,698	123,655
Furniture and fixtures	205,051	205,051
Computer equipment	637,327	677,569
Leasehold improvements	5,428,860	7,218,687
Construction-in-progress	337,255	2,830,407
Total property, plant and equipment	11,219,384	16,046,616
Accumulated depreciation	(6,871,673)	(7,803,604)
Property, plant and equipment, net	\$ 4,347,711	\$ 8,243,012

The Company recorded depreciation expense of \$651,560 and \$931,931, respectively, for the years ended December 31, 2016 and 2017. Maintenance and repairs are expensed as incurred and were \$203,466 and \$244,885, respectively, for the years ended December 31, 2016 and 2017.

During 2015, the Company commenced construction on improvement within its current facilities of approximately \$2,400,000, which included both facility construction and implementation of specialized lab equipment. The following table details the activity of Construction-in-Progress ("CIP") in 2016 and 2017

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

7. Property, Plant and Equipment (Continued)

and the associated transfer to Leasehold Improvements and Lab Equipment when the assets were placed in service:

	Leasehold Improvements	Lab Equipment	Total
Balance as of December 31, 2015	\$ 237,407	\$ —	\$ 237,407
Add: Purchases related to CIP	2,484,711	99,047	2,583,758
Less: Transfer due to placed in service	<u>(2,384,863)</u>	<u>(99,047)</u>	<u>(2,483,910)</u>
Balance as of December 31, 2016	337,255	—	337,255
Add: Purchases related to CIP	3,108,809	812,205	3,921,014
Less: Transfer due to placed in service	<u>(1,427,862)</u>	<u>—</u>	<u>(1,427,862)</u>
Balance as of December 31, 2017	<u>\$ 2,018,202</u>	<u>\$ 812,205</u>	<u>\$ 2,830,407</u>

The Construction in Progress balance includes \$76,844 and \$57,625 of capitalized interest costs for the years ended December 31, 2016 and 2017, respectively.

In December 2016, the Company executed an agreement with a commercial manufacturer to build a PRINT Particle Fabrication Line for the production of cGMP particles for Pharmaceutical Products. The cost is expected to be approximately \$1,500,000. The Company financed this transaction with a 3rd party vendor ("Lessor") capital lease. The Lessor is making scheduled payments to the manufacturer per the payment schedule in the agreement as the asset is built. The Lessor charges the Company a monthly lease rate on the scheduled payments made to the manufacturer until the asset is completed and placed in service. The lease commenced upon completion of construction on March 1, 2018.

In accordance with ASC 840, *Leases*, for build-to-suit arrangements where the Company is involved in the construction of an asset prior to the commencement of the lease or takes some level of construction risk, the Company is considered the accounting owner of the assets during the construction period. Accordingly, during construction activities, the Company recorded a Construction in progress asset within Property, plant and equipment and a corresponding deferred financing obligation liability for contributions by the lessor toward construction. Upon completion of the construction, since the lease met "sale-leaseback" criteria, the Company removed the asset and related financial obligation from the Balance Sheets and treated the equipment lease as a capital lease. As of December 31, 2017, \$1,341,810 for a build-to-suit asset is included in Property, plant and equipment, net, and the corresponding financial obligation of \$1,341,810 in deferred financing obligation in the accompanying Balance Sheets.

8. Income Taxes

No provision for federal and state income tax expense has been recorded for the years ended December 31, 2016 and 2017 due to the valuation allowance recorded against the net deferred tax asset and recurring losses.

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)****December 31, 2016 and 2017****8. Income Taxes (Continued)**

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was enacted into law. This new law includes significant changes to the U.S. corporate income tax system, including a permanent reduction in the corporate income tax rate from 35% to 21%, limitations on the deductibility of interest expense and executive compensation and the transition of U.S. international taxation from a worldwide tax system to a territorial tax system. The TCJA also limits interest expense deductions to 30% of taxable income before interest, depreciation and amortization from 2018 to 2021 and then taxable income before interest thereafter. The TCJA permits disallowed interest expense to be carried forward for five years. The Company has calculated its best estimate of the impact of the TCJA in its year-end income tax provision in accordance with its understanding of the TCJA and guidance available at the time. The overall impact of the TCJA resulted in a decrease to the deferred tax assets and a corresponding decrease to the valuation allowance of \$14.1 million. Using the guidance issued by the SEC staff in Staff Accounting Bulletin No. 118, the Company expects to complete the accounting for the TCJA when the 2017 U.S. federal income tax return is filed in 2018.

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows at December 31, 2016 and 2017:

	2016	2017
Non-current deferred income tax assets:		
Tax loss carryforwards	\$ 24,330,103	\$ 22,274,378
Deferred revenue	4,022,192	2,098,191
Research and development credits	2,382,047	2,382,047
Stock-based compensation	414,409	277,948
Bad debt	17,309	11,053
Compensation	87,658	9,766
Fixed assets	76,545	63,570
Patent amortization	180,734	106,622
Other	349,132	768,936
Valuation allowance	(31,860,129)	(27,992,511)
Total non-current deferred income tax assets	<u>\$ —</u>	<u>\$ —</u>

At December 31, 2016 and 2017, the Company established a full valuation allowance against its net deferred tax assets since, at the time, the Company could not assert that it was more likely than not that its deferred tax assets would be realized. As a result, there was an increase in the valuation allowance in 2016 of \$5,267,135 and a decrease in 2017 of \$3,934,784.

At December 31, 2017, the Company had federal and state income tax loss carryforwards of \$96,856,855 and \$97,946,266, respectively, which begin to expire in 2027 for federal purposes and in 2022 for state

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

8. Income Taxes (Continued)

purposes. The utilization of the loss carryforwards to reduce future income taxes will depend on the Company's ability to generate sufficient taxable income prior to the expiration of the loss carryforwards.

The Internal Revenue Code of 1986, as amended, contains provisions which limit the ability to utilize the net operating loss carryforwards in the case of certain events, including significant changes in ownership interests. If the Company's net operating loss carryforwards are limited, and the Company has taxable income which exceeds the permissible yearly net operating loss carryforwards, the Company would incur a federal income tax liability even though net operating loss carryforwards would be available in future years.

The reasons for the difference between actual income tax expense for the years ended December 31, 2016 and 2017 and the amount computed by applying the statutory federal income tax rate to income before income tax are as follows:

	2016		2017	
	Amount	% of Pretax Earnings	Amount	% of Pretax Earnings
Income tax benefit at statutory rate	\$ (5,417,479)	34.0%	\$ (9,912,442)	34.0%
State income taxes, net of federal tax benefit	(314,219)	2.0	(581,901)	2.0%
Non-deductible expenses	2,616	(0.1)	12,757	(0.1)%
Stock-based compensation	83,957	(0.5)	153,033	(0.5)%
Non-deductible interest expense	—	—	3,795,060	(13.0)%
Derivative and warrant fair value adjustments	—	—	(4,040,646)	13.9%
Change in federal rate	—	—	14,113,550	(48.4)%
Change in state rate	442,782	(2.8)	371,138	(1.3)%
Other	(64,792)	0.4	24,235	(0.1)%
Change in valuation allowance	5,267,135	(33.0)	(3,934,784)	13.5%
Provision for income taxes	\$ —	0.0%	\$ —	0.0%

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. As of December 31, 2017, the Company had no unrecognized tax benefits. The Company's policy for recording interest and penalties related to uncertain tax provisions is to record them as a component of the provision for income taxes. The Company did not have any accrued interest or penalties associated with any unrecognized tax positions as of December 31, 2016 and 2017, and there were no such interest or penalties recognized during the years ended December 31, 2016 and 2017.

The Company has all tax years open to examination by federal tax and state tax jurisdictions. No income tax returns are currently under examination by taxing authorities.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

9. Related-Party Transactions

Envisia

Through June 2016, Liquidia was party to shared service agreements with Envisia and LQ3, whereby they shared facilities, patent costs, management services and manufacturing in exchange for monetary consideration.

For shared services provided by Liquidia to Envisia, Liquidia recorded the following as a reduction of Research and Development Expenses in the accompanying Statements of Operations and Comprehensive Loss for the years ended December 31, 2016 and 2017:

- § Facilities shared services of \$462,000 and \$0, respectively; and
- § Sharing of patent costs of \$152,893 and \$105,623, respectively.

In 2015, Liquidia entered into custom manufacturing agreements with Envisia to provide cGMP material. Revenue is recognized as costs are incurred at amounts billable to the organization. Revenue recognized by Liquidia under these agreements totaled \$172,358 and \$0 for the years ended December 31, 2016 and 2017, respectively.

In May 2016, net shared service costs that remained unpaid by Envisia at the time were converted into a promissory note with principal amount of \$985,594, bearing interest at the rate of 5.00% per annum that was recorded as a Note Receivable. Principal and interest payments were scheduled to be paid in eight equal monthly installments, maturing on December 31, 2016.

Full payment of the promissory note was received in August 2016, and accordingly the Company issued a full release and discharge of the note.

Liquidia had a total net receivable from Envisia of \$49,783 and \$0 as of December 31, 2016 and 2017, respectively.

In May 2015, the license related to the field of dermatology and articular was purchased back by the Company from Envisia in exchange for 50,000 shares of its Envisia common stock. The purchase price (license consideration) of 50,000 shares of Envisia common stock was based upon third-party appraisals of the value of the Envisia common stock at the transaction date.

In March 2017, the license related to the Otic field, along with other intellectual property rights, as defined, was purchased back by the Company from Envisia in exchange for 75,000 shares of its Envisia common stock.

LQ3

Liquidia charged LQ3 through February 28, 2016 for facilities shared services of \$10,400, which were recorded as a reduction of Research and Development Expenses in the accompanying Statements of Operations and Comprehensive Loss.

Liquidia did not have any receivable or payable balances with LQ3 as of December 31, 2016 and 2017.

Note Receivable from Related Party

In September 2016, the Company's Chief Executive Officer entered into a loan agreement with the Company to finance the exercise of stock options to purchase 500,000 shares for \$94,271, with a maturity date upon the earlier of (i) immediately prior to the Company's public filing of a prospectus or other offering

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

9. Related-Party Transactions (Continued)

document relating to an IPO of securities or (ii) September 19, 2017. Interest accrues at 1.00% per annum. This loan receivable was recorded in the Company's 2016 Balance Sheet at that date as a \$55,000 offset to stockholders' equity and \$39,534 within related party receivables. The note receivable was repaid in full in 2017.

10. Commitments and Contingencies**Operating Leases**

The Company conducts its operations from leased facilities in Morrisville, North Carolina, the leases for which expire in 2022. In June 2007, the Company entered into an 84-month operating lease agreement, commencing in November 2007, for general office, laboratory, research and development and light manufacturing space. The lease agreements require the Company to pay property taxes, insurance, common area expenses and maintenance costs.

In November 2014 and November 2015, the Company executed the first and second extension period clauses, respectively, resulting in additional months to the lease for the related premises extending until October 2022. As part of these extensions, the Company received tenant allowances of \$228,973 and \$392,020, respectively, for expansion of laboratory and office space.

In January 2017, the Company signed a second extension to the lease of its primary building for an additional 48 months and expiring October 31, 2026. A tenant allowance of approximately \$2,000,000 was also made available for use to help fund the expansion and build out of the primary building. This allowance was fully utilized as of December 31, 2017.

These allowance amounts were recorded as a long-term deferred rent liability and amortized as a reduction in rent expense over the remaining term of the lease. The balance of all unamortized deferred rent and allowances totaled \$665,817 and \$2,881,180 as of December 31, 2016 and 2017, respectively.

The Company also leases copier equipment under an operating lease, which expires in 2019.

As of December 31, 2017, future minimum lease payments under operating leases having initial or remaining non-cancelable lease terms in excess of one year were as follows:

2018	\$	968,464
2019		994,408
2020		1,023,949
2021		1,054,558
2022		1,073,086
Thereafter		4,159,141
Total	\$	<u>9,273,606</u>

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

10. Commitments and Contingencies (Continued)

Rent expense, including other facility expenses, for the years ended December 31, 2016 and 2017 was \$705,107 and \$1,046,721, respectively.

In March 2012, the Company entered into an agreement, as amended, with Chasm Technologies, Inc. for manufacturing consulting services related to the Company's manufacturing capabilities during the term of the agreement. As future contingent consideration under the agreement, the Company agreed to pay \$400,000 related to the timing of the Company's first Phase 3 clinical trial which commenced in December 2017. The consideration of \$400,000 is comprised of initial consideration of \$20,000 paid in 2017, \$80,000 to be paid upon first dosing of the first patient in the Phase 3 clinical trial, and \$300,000 due no later than December 31, 2018. In addition, the Company also agreed to pay future contingent royalties on net sales totaling no more than \$1,500,000. As of December 31, 2016 and 2017, \$0 and \$380,000, respectively, was accrued and is included in Accrued Expenses in the accompanying Balance Sheets.

Capital Leases

The Company leases specialized lab equipment under leases classified as capital leases. The related capitalized assets are amortized on a straight-line basis over the estimated useful life of the asset. The interest rates related to these lease obligations range from 0.2% to 12.2%. The following table shows the future minimum lease payments under the capital leases by year and the present value of the minimum lease payments:

Year ending December 31:	
2018	\$ 489,022
2019	313,856
2020	215,841
Thereafter	—
Total minimum lease payments	1,018,719
Less: Amount representing interest	(38,296)
Present value of minimum lease payments	<u>\$ 980,423</u>

The net book value of assets under capital leases was \$915,300 as of December 31, 2017. At December 31, 2017, the present value of minimum lease payments due within one year was \$489,022.

Other

In June 2017, the Company was served with a lawsuit filed by Allergan, Inc., in the United States District Court for the Central District of California, naming Liquidia and Envisia as defendants. The lawsuit alleged that Envisia's development efforts of one of its product candidates misused Allergan confidential information. The Company's involvement results from its possibly related activities that occurred prior to November 8, 2013, the date of formation of Envisia. In October 2017, the Company settled the litigation with Allergan, Inc., with no financial payments due from the Company or other consideration that materially

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

10. Commitments and Contingencies (Continued)

affects the operation of the Company. There was no accrual for this in the Balance Sheets as of December 31, 2016 and 2017.

11. Long-Term Debt

Long-term debt consisted of the following as of:

	Maturity Date	December 31,	
		2016	2017
Pacific Western Bank Tranche I note	December 8, 2019	\$ 2,974,240	2,488,572
Pacific Western Bank Tranche II note	October 10, 2020	2,974,240	2,820,382
Pacific Western Bank Tranche III note	October 10, 2020	—	3,760,509
UNC promissory note	June 30, 2018	2,165,180	2,257,684
Convertible notes, net of discounts	December 31, 2018	—	9,837,984
Less current portion		(2,898,101)	(15,608,349)
Long-term debt, less current portion		\$ 5,215,559	\$ 5,556,782

UNC Promissory Note

In September 2012, the Company issued an unsecured promissory note with principal amount of \$600,000 as a sublicense fee to UNC, with principal and interest due in full on September 1, 2016, bearing an interest rate equal to the one-year LIBOR plus 2%, compounding annually. In June 2016, the Company (as licensee) negotiated modifications to its license agreement with UNC in exchange for an increase of \$1,500,000 to the note payable and extension of the maturity to December 31, 2017. As the Company had previously recorded a contingent liability of \$1,500,000 related to this license, the increase to the note payable was recorded as a reduction to the accrued expense balance at this time. In addition, the initial note of \$600,000 plus accrued interest were extended under the same terms. The combined note payable interest rate was increased by 1%. The balance of the promissory note at December 31, 2016 and 2017 was \$2,165,180 and \$2,257,684, respectively. In December 2017, the Company executed an amendment to the UNC Letter Agreement that extends the maturity date of the promissory note from December 31, 2017 to June 30, 2018. All other terms and conditions of the Letter Agreement continue in force through the new maturity date.

Pacific Western Bank

In January 2016, the Company entered into a Loan and Security Agreement ("LSA") with Pacific Western Bank ("Pacific Western"). The LSA provides that the Company may borrow up to \$3,000,000 in a term loan ("Term Loan") to supplement working capital and finance facility expansion and capital equipment purchases. The Term Loan is collateralized by a lien on all assets of the Company that are not otherwise encumbered, including a negative pledge on intellectual property prohibiting its sale without the bank's consent. The Company is also obligated to comply with various other customary covenants, including, among other things, restrictions on its ability to dispose of assets, replace or suffer the departure of the

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)****December 31, 2016 and 2017****11. Long-Term Debt (Continued)**

CEO or CFO without delivering 10 days' prior written notification to the bank, suffer a change on the Board of Directors which would result in the failure of at least one partner of either New Enterprise Associates or Canaan Partners or their respective affiliates to serve as a voting member, make acquisitions, be acquired, incur indebtedness, grant liens, make distributions to its stockholders, make investments, enter into certain transactions with affiliates or pay down subordinated debt, subject to specified exceptions. Amounts borrowed under the Term Loan may be repaid at any time without penalty or premium. The Term Loan was interest-only through June 8, 2017, followed by an amortization period of 30 months of equal monthly payments of principal plus interest, beginning on August 8, 2017 and continuing on the same day of each month thereafter until paid in full. Any amounts borrowed under the Term Loan bore interest at 3.75% during the initial 18-month interest-only period. Following the interest-only period, the interest rate increased to 5.00%, which is fixed for the duration of the loan. At closing, the Company was granted availability of the full \$3,000,000, later designated as Tranche I of the Term Loan, with proceed disbursements in the minimum principal amount of \$250,000 per draw. The Tranche I loan fully matures and expires when the final payment is made on January 6, 2020.

In October 2016, the Company amended the Term Loan ("Second Amendment") to (1) increase the initial loan amount to \$10,000,000 by providing a second Term Loan of \$3,000,000 ("Tranche II") and a third Term Loan of \$4,000,000 ("Tranche III"); and (2) amend a section of the LSA regarding incurred indebtedness. The additional term loans are both subject to the same terms and conditions as the original Term Loan under the LSA. With the Second Amendment, new covenants were enacted requiring the Company to (1) receive proceeds from a sale or issuance of equity by December 31, 2016, which was achieved; (2) file a new clinical trial authorization by December 31, 2016, which was achieved; and (3) agree to set future covenants in future amendments after achievement of the aforementioned milestones. Tranche II and Tranche III both bear a fixed rate of interest of 3.75% until October 12, 2017, and 5.0% per annum beginning October 13, 2017 and thereafter, followed by an amortization period of 36 months of equal monthly payments of principal plus interest, beginning on November 12, 2017. Tranche II and Tranche III loans fully mature and expire when the final payment is made on October 12, 2020. As of December 31, 2016 Tranche I, Tranche II, and Tranche III have outstanding balances of \$2,974,240, \$2,974,240, and \$0, respectively. As of December 31, 2017 Tranche I, Tranche II, and Tranche III have outstanding balances of \$2,488,572, \$2,820,382, and \$3,760,509, respectively.

In early 2017, the Company breached a covenant in the LSA with Pacific Western Bank by failing to set mutually agreeable financial or milestone covenants on or before January 30, 2017. On March 30, 2017, pursuant to a Fourth Amendment to the LSA entered into between the Company and Pacific Western, Pacific Western waived the breach of this covenant and the covenant remains in effect.

In October 2017, the Company breached a covenant in its LSA with Pacific Western by failing to maintain minimum levels of cash. On November 30, 2017, pursuant to the Eighth Amendment to the Loan and Security Agreement, Pacific Western waived the breach of this covenant and amended the LSA to require the Company to maintain a cash balance of at least \$2,500,000, monitored daily, from November 30, 2017 until the Company receives at least \$12,000,000 from the issuance of equity instruments by December 31, 2017. The Company was in breach of this covenant as of December 31, 2017. In February 2018, Pacific Western waived the breach of this covenant as a result of the Company receiving equity financing in excess of the requirement.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

Convertible Notes

In January and February 2017, the Company issued an aggregate of \$11.8 million in principal of convertible promissory notes. The January and February Notes are accompanied by warrants to purchase of up to 25% of the aggregate principal amounts of the notes, equal to 3,698,128 shares of Series C-1. The January and February Notes mature on December 31, 2018, as amended, and bear interest at eight percent (8%) per annum. Interest is earned daily and computed on the actual number of days elapsed until all the amounts under the notes have been paid in full. All unpaid principal and all accrued, but unpaid interest of each investor's note is due and payable on demand at the request of the investor at any time after December 31, 2018. In addition, upon the consummation of an asset sale, acquisition, or IPO, as defined, the investors may elect to accelerate the repayment of the note or convert into Class A or Series C-1 based on the following scenarios:

Singapore IPO

Upon the consummation of an IPO of the Company's capital stock registered on the Singapore Exchange Securities Trading Limited (a "Singapore IPO") after August 1, 2017, the holders have the right to elect to (i) receive payment from the Company equal to the outstanding principal plus all accrued but unpaid interest or (ii) convert the outstanding principal and accrued but unpaid interest into such shares of the Company's capital stock at a price per share that is equal to 70% of the price per share paid by the purchasers of such shares in such IPO.

Domestic IPO

Upon the consummation of an IPO of the Company's Common Stock registered under the Securities Act of 1933, after which such Common Stock is listed for trading on a United States national securities exchange (a "Domestic IPO"), the holders have the right to elect to (i) receive payment from the Company equal to the outstanding principal plus accrued but unpaid interest or (ii) convert all outstanding principal and accrued but unpaid interest into shares of the Company's Common Stock at a price per share that is equal to 75% of the price per share paid by the purchasers of the shares in such IPO.

Automatic Conversion upon Qualified Financing

The principal and accrued but unpaid interest automatically convert into shares of Preferred Stock issued in a Qualified Financing, as defined. The number of shares of Preferred Stock issued will be equal to the quotient of (i) the principal amount plus accrued but unpaid interest and (ii) 75% of the lowest price per share paid by investors participating in the Qualified Financing. If a Qualified Financing had not occurred prior to December 31, 2017, the holders of the notes had the right to elect to convert the outstanding principal plus accrued but unpaid interest into shares of the Company's Series C-1 at \$0.59808 per share. The holders did not exercise this right.

Conversion upon Non-Qualified Financing

The holders may to elect to convert the outstanding principal and accrued but unpaid interest on the notes into any shares of the Company's capital stock that are issued in any financing transaction other than a Qualified Financing, a Domestic IPO or a Singapore IPO (a "Non-Qualified Financing"). The number of shares issued will be equal to the quotient of (i) the sum of the principal amount plus accrued but unpaid interest and (ii) 75% of the lowest price per share paid by investors participating in the Non-Qualified Financing.

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

Strategic Transaction

Upon the consummation of an asset sale of all or substantially all of the Company's assets or an acquisition, merger or change in control (a "Strategic Transaction"), the holders of the notes have the right to elect to (i) receive a payment from the Company equal to the sum of (1) 200% of the then outstanding principal and (2) accrued but unpaid interest or (ii) convert the outstanding principal and accrued but unpaid interest into shares of the Company's Series C-1 at \$0.59808 per share.

Additionally, upon the occurrence of certain Events of Default, as defined in the notes, each investor may elect to accelerate the repayment of all unpaid principal and accrued interest under each note and the notes provide for automatic redemption upon the occurrence of certain bankruptcy related Events of Default, as defined in the notes.

In July 2017, the Company entered into a series of unsecured convertible note agreements of \$10.4 million in the aggregate. The July Notes bear interest at a rate of 8% per annum with a maturity date of December 31, 2018. In conjunction with this financing, the Company also entered into a commitment with an advisor in the form of a convertible note amounting to \$442,356 with terms similar to the related transaction. The July Notes were not accompanied by warrants. Principal plus accrued interest convert into either preferred or common stock at the time of a Qualified Financing at a discount to the share price, depending on the financing similar to the January and February Notes. Conversion discounts on these convertible notes were largely similar to the January and February Notes except that the discount for a Singapore and Domestic IPO were both 50%.

In November 2017, the Company issued a series of unsecured subordinated convertible notes with an aggregate principal amount of \$5.2 million to new and existing investors. The November Notes bear interest at a rate of 8% per annum with a maturity date of December 31, 2018. Principal plus accrued interest convert into either preferred or common stock at the time of a qualified financing, as defined, at a discount to the share price, depending on the financing. In conjunction with this financing, the Company also incurred fees of \$392,000. The November Notes were not accompanied by warrants. Conversion discounts on these convertible notes were largely similar to the July Notes except that there was no discount upon mandatory conversion into a private financing round. In addition, at maturity, the November Notes (principal plus accrued but unpaid interest) convert into shares of the Company's Series C-1 at \$0.72877 per share.

Accounting for Convertible Notes

The Company accounts for debt as liabilities measured at amortized cost and amortizes the resulting debt discount from allocation of proceeds to interest expense using the straight-line method over the expected term of the notes pursuant to ASC 835, *Interest* (ASC 835).

In connection with the issuance of the convertible notes and warrants, the Company recorded discounts equal to the full amount of each series of notes based on an allocation of proceeds to the warrants, an allocation to bifurcated derivatives which consist of a contingent put option upon a change of control or acceleration upon event of default and a contingent call option upon a change of control included in the notes, and a beneficial conversion feature, before issuance costs, based on the difference between the fair value of the underlying common stock at the commitment date of each note transaction and the effective conversion price of the notes, as limited by the proceeds allocated to the notes. Since the initial carrying value of all three series of convertible notes was \$0, the combined debt issuance costs of \$1,370,248 were charged to Interest Expense in the accompanying Statements of Operations and Comprehensive Loss. See

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

Note 2 for discussion of the Company's policies for accounting for convertible instruments with detachable liability-classified warrants.

The following is a summary of the liability component of Convertible Notes as of December 31, 2017:

	January and February Notes	July Notes	November Notes	Total
Principal amount of Convertible Notes	\$ 11,796,168	\$ 10,442,356	\$ 5,150,000	\$ 27,388,524
Unamortized discount on the notes	(5,504,878)	(7,291,816)	(4,753,846)	(17,550,540)
	<u>\$ 6,291,290</u>	<u>\$ 3,150,540</u>	<u>\$ 396,154</u>	<u>\$ 9,837,984</u>

The debt discount is being amortized as interest expense through the date of maturity, December 31, 2018. As of December 31, 2017, stated coupon interest accrued for convertible notes was \$1,323,958 and amortization of debt discount and debt issuance costs were \$9,837,984 and both are included in interest expense in the Statements of Operations and Comprehensive Loss.

Accounting for the Warrant Liabilities

The Company's liability-classified warrants were recorded as liabilities at their estimated fair value at the date of issuance, with the subsequent changes in estimated fair value recorded in derivative and warrant fair value adjustments in the Company's Statements of Operations and Comprehensive Loss. The warrants, with a fair value of \$4,474,122 at inception, were initially recorded as warrant liabilities on the Balance Sheets with a corresponding discount to the notes. The change in the estimated fair value of the warrant liabilities for the year ended December 31, 2017 resulted in a fair value adjustment of \$2,011,263 and is included in derivative and warrant fair value adjustments in the Statements of Operations and Comprehensive Loss. Changes in the values of the warrant liabilities are summarized below:

	Warrant Liabilities
Fair value at issuance in February 2017	\$ 4,474,122
Change in fair value	(2,011,263)
Fair value at December 31, 2017	<u>\$ 2,462,859</u>

Assumptions Used in Determining Fair Value of Liability Classified Warrants

To estimate the fair value of the warrants, the Company used a combination of the Current Value Method, Option Pricing Method ("OPM"), and Black-Scholes Option Pricing Model, in a Probability-Weighted Expected Return Method ("PWERM") context, or the Hybrid Method ("Hybrid Method"). The Company estimated the fair value of Series C-1 and estimated the fair value of Class A in the Singapore IPO and Domestic IPO scenarios. The Company used a Black-Scholes option pricing model to estimate the fair value

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

of the warrants using the life of the warrants, assuming a Strategic Transaction does not occur, and the fair value of underlying equity values from the first step. The Company probability-weighted each scenario to arrive at an estimated fair value of the warrants.

Depending upon the scenario, warrants could be exercised to purchase either Class A or Series C-1 stock. To value the warrants in each scenario, the Company used either an OPM or the Black-Scholes option pricing model. The hybrid method is a useful alternative to explicitly modeling all PWERM scenarios in situations when the Company has transparency into one or more near-term exits but is unsure about what will occur if the current plans fall through.

Key assumptions in the hybrid method include:

- § OPM-Stay Private, US IPO or Singapore IPO
- § Probability
- § Timing (Each IPO)
- § Enterprise value
- § Type of Security
- § Estimated security value
- § Methodology of valuing warrant OPM

Accounting for the Derivative Liabilities

Management determined that the various conversion features discussed above represent, in substance, a put option (redemption feature) designed to provide the investor with a fixed monetary amount, settled in shares. Management determined that this put option and the Contingent Interest should be separated from the notes and accounted for as a compound derivative liability primarily because the notes were issued at a substantial discount because the warrants, put option, and the Contingent Interest meet the net settlement criterion. The compound derivative liabilities were initially recorded as a derivative liabilities on the Balance Sheets and a corresponding discount to the notes. The change in the estimated fair value of the derivative liabilities for the year ended ended December 31, 2017 resulted in a fair value adjustment of \$9,872,990 and is included in derivative and warrant fair value adjustments in the Statements of Operations and Comprehensive Loss.

Changes in the values of the derivative liabilities are summarized below:

	Derivative Liabilities related to the			
	January and February Notes	July Notes	November Notes	Total
Fair value at issuance	\$ 4,365,880	\$ 5,507,110	\$ —	\$ 9,872,990
Change in fair value	(4,365,880)	(5,507,110)	—	(9,872,990)
Fair value at December 31, 2017	\$ —	\$ —	\$ —	\$ —

Liquidia Technologies, Inc.

Notes to Financial Statements (Continued)

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

Assumptions Used in Determining Fair Value of Compound Bifurcated Derivative

The Company assessed the accounting for the Convertible Notes and determined that there were several embedded derivatives that required bifurcation from the host debt instrument at fair value in accordance with ASC 815, *Derivatives and Hedging*. These embedded derivatives are more like equity instruments, and thus not "clearly and closely related" to the economic characteristics of the Convertible Notes. Further, they were determined not to meet the definition of being indexed to the Company's own stock due to the variable number of shares to be converted under different scenarios. When a host instrument has multiple embedded derivative features that require bifurcation, ASC 815 requires that they be bundled as one and accounted for separately from the Convertible Notes at fair value.

To determine the fair value of such derivatives, the Company compared i) the expected payout from the different conversion scenarios upon their expected date of occurrence, discounted to present value at a risk-free rate, to 2) the fair value of the Convertible Notes if it were paid in cash or converted into Series C-1 on December 31, 2017. The difference between these two results represents the fair value of the bundled derivative.

First, the Company estimated the expected payout under the Singapore IPO, Domestic IPO and Qualified Financing scenarios. The principal and accrued interest on the Convertible Notes were calculated through the expected payout date, and divided by the stated conversion price discount to determine the amount that would be paid upon occurrence of the event. The payoff from each scenario was then discounted to present value at the risk-free rate and the Company probability-weighted each scenario to arrive at the expected payout value for purposes of the valuation. Next, it was assumed that if conversion under the IPO or Financing scenarios did not occur by December 31, 2017, it would be most advantageous for the investors to convert the Convertible Notes into Series C-1 or request payment of principal and interest in cash. The value of the Convertible Note under these scenarios was modeled using the OPM. The difference between the payout value under the various conversion scenarios and the value of the Convertible Notes under the OPM, assuming the Convertible Notes are not converted or paid until December 31, 2017, results in the fair value of the bundled derivative.

Accounting for the Beneficial Conversion Feature

The Company did not separate from the notes the conversion feature in which the holders may convert the principal and interest on the notes into shares of the Company's Series C-1 Preferred Stock at \$0.59808 per share if a Qualified Financing has not occurred prior to December 31, 2017. The Company concluded that this conversion feature is a beneficial conversion feature that should be recognized separately and measured initially at its intrinsic value. Since the intrinsic value of this beneficial conversion feature is greater than the proceeds allocated to the notes, the amount of the discount assigned to the beneficial conversion feature is limited to the amount of the proceeds allocated to the notes. The Company recorded the beneficial conversion feature of \$2,956,166, \$4,935,246, and \$5,150,000 as additional paid-in capital and a corresponding discount to the notes on the Balance Sheets for the January and February Notes, July Notes and November Notes, respectively.

Liquidia Technologies, Inc.**Notes to Financial Statements (Continued)**

December 31, 2016 and 2017

11. Long-Term Debt (Continued)

Scheduled maturities of long-term debt as of December 31, 2017 are as follows:

Year ending December 31:	
2018	\$ 33,179,542
2019	3,533,333
2020	2,044,444
Total	38,757,319
Less: Unamortized discount	(17,550,541)
Less: Unamortized debt issuance costs	(41,647)
Less: Current portion of long-term debt	(15,608,349)
	<u>\$ 5,556,782</u>

12. Subsequent Events

Subsequent events have been evaluated for disclosure through March 14, 2018, the date the Company's financial statements were available to be issued.

In February 2018, the Company received proceeds of \$25.6 million in exchange for the corresponding sale of Series D Preferred Stock at a price per share of \$0.59808 and related rights offering. In addition, all outstanding convertible notes, plus accrued interest, totalling \$28.9 million, were converted into Series D preferred stock at the same price per share (see Note 3).

As mentioned in Note 11, as of December 31, 2017, the Company was in breach of a certain covenants under its LSA with Pacific Western. In February 2018, Pacific Western waived the breach of this covenant as a result of the Company receiving equity financing in excess of the requirement (see Note 11)

In March, 2018, the Board approved the grants of 13,645,767 stock options and 2,146,767 restricted stock units all with an exercise price of \$0.55 per share.

In March 2018, the Company completed construction and placed in service of its new PRINT Particle Fabrication Line, which was being financed with Lessor. Upon completion, the lease commenced in the same month (see Note 7).

Shares



Liquidia Technologies, Inc.

Common Stock

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

**Jefferies
Cowen**

Co-Managers

**Needham & Company
Wedbush PacGrow**

, 2018

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the U.S. Securities and Exchange Commission, or the SEC, registration fee, the FINRA filing fee and Nasdaq listing fee.

	Amount
SEC registration fee	\$ *
FINRA filing fee	*
Nasdaq listing fee	*
Accountants' fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses	*
Transfer agent's fees and expenses	*
Printing and engraving expenses	*
Miscellaneous	*
Total expenses	\$ *

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law, or the DGCL, 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 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. Our amended and restated certificate of incorporation will provide that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he 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 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.

Upon completion of this offering, our amended and restated certificate of incorporation and amended and restated bylaws will provide indemnification for our directors and officers to the fullest extent permitted by the DGCL. We will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that 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 us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

Prior to the completion of this offering, we intend to enter into separate indemnification agreements with each of our directors and certain officers. Each indemnification agreement will provide, among other things, for indemnification to the fullest extent permitted by law and our amended and restated certificate of incorporation and amended and restated bylaws against any and all expenses, judgments, fines, penalties and amounts paid in settlement of any claim. The indemnification agreements will provide for the advancement or payment of all expenses to the indemnitee and for the reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law and our amended and restated certificate of incorporation and amended and restated bylaws.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, or the Securities Act, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities.

The following sets forth information as to all securities we have sold since March 9, 2015, which were not registered under the Securities Act.

Series D Preferred Stock

On February 2, 2018, we issued and sold an aggregate of 82,560,006 shares of Series D preferred stock at a price per share equal to \$0.59808. Of the 27 investors which participated in the initial closing of this offering, six investors purchased an aggregate of 34,276,349 shares of Series D preferred stock for an aggregate of \$20.5 million and 26 holders of outstanding convertible notes in the aggregate amount of \$28.9 million converted into an aggregate of 48,283,657 shares of Series D preferred stock.

Pursuant to the terms of the Series D Preferred Stock Purchase Agreement, on February 15, 2018 we sold 8,360,085 shares of Series D preferred stock to an accredited investor for a total purchase price of \$5.0 million.

Additionally, pursuant to the terms of the Series D Preferred Stock Purchase Agreement, we offered our existing stockholders who are accredited investors the opportunity to purchase their pro rata portion of the Series D preferred stock in a rights offering. On February 28, 2018, we sold an aggregate of 227,391 shares of Series D preferred stock for an aggregate purchase price of \$135,998.

We claimed an exemption from registration under the Securities Act for the issuance and sale of the Series D preferred stock under Section 4(a)(2) of the Securities Act in that such sales and issuances do not involve a public offering.

Unsecured Subordinated Convertible Promissory Notes

In a series of closings from January 9, 2017 to November 29, 2017, we issued and sold an aggregate of approximately \$27.4 million underlying a total of 27 unsecured subordinated convertible promissory notes, each accruing simple interest at a rate of 8% per annum, or the Notes. See "Description of Capital Stock — Common Stock" for more information.

We claimed an exemption from registration under the Securities Act for the issuance and sale of the Notes under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering.

Warrants

In connection with the closings of the Notes from January 9, 2017 to February 17, 2017, we issued and sold 17 warrants to purchase an aggregate of 3,698,128 shares of our Series C-1 preferred stock at an exercise price of \$0.001 per share which are convertible into an aggregate of 4,394,914 shares of common stock. See "Description of Capital Stock — Warrants" for more information.

We claimed an exemption from registration under the Securities Act for the issuance and sale of such Warrants under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering.

Options

On May 13, 2015, we granted incentive stock options to five employees to purchase an aggregate of 58,000 shares of common stock under our 2004 Plan, with an exercise price equal to \$0.28 per share.

On May 21, 2015, we granted incentive stock options to 17 employees to purchase an aggregate of 3,374,000 shares of common stock under our 2004 Plan, with an exercise price equal to \$0.28 per share.

145,417 of such option shares have subsequently been exercised for common stock and 197,083 option shares were terminated without being exercised.

On August 27, 2015, we granted incentive stock options to nine employees to purchase an aggregate of 960,362 shares of common stock under our 2004 Plan, with an exercise price equal to \$0.28 per share. 239,766 of such option shares have subsequently been exercised for common stock.

On November 3, 2015, we granted incentive stock options to nine employees to purchase an aggregate of 713,161 shares of common stock under our 2004 Plan, with an exercise price equal to \$0.28 per share. 30,000 of such option shares have subsequently been exercised for common stock. 168,400 of such option shares were terminated without being exercised.

On February 10, 2016, we granted incentive stock options to six employees to purchase an aggregate of 662,756 shares of common stock under our 2004 Plan, with an exercise price equal to \$0.35 per share. 17,617 of such option shares were terminated without being exercised.

On August 10, 2016, we granted incentive stock options to eight employees to purchase an aggregate of 465,617 shares of common stock under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, or the 2016 Plan, with an exercise price equal to \$0.35 per share.

On August 30, 2016, we granted incentive stock options to three employees to purchase an aggregate of 235,000 shares of common stock under the 2016 Plan, with an exercise price equal to \$0.35 per share.

On December 7, 2016, we granted a non-statutory stock option to Arthur Kirsch, a director, to purchase 150,000 shares of common stock under the 2016 Plan, with an exercise price equal to \$1.21 per share.

On March 15, 2017, we granted incentive stock options to seven employees to purchase an aggregate of 219,000 shares of common stock under the 2016 Plan, with an exercise price equal to \$1.21 per share. 9,000 of such option shares were terminated without being exercised.

On May 31, 2017, we granted an incentive stock option to an employee to purchase 18,000 shares of common stock under the 2016 Plan, with an exercise price equal to \$1.21 per share.

On March 7, 2018, we granted incentive stock options to 64 employees to purchase an aggregate of 11,835,767 shares of common stock under the 2016 Plan, with an exercise price equal to \$0.55 per share. Included in these 64 grants were grants to: (i) Neal Fowler, our Chief Executive Officer, for 3,900,000 shares; (ii) Kevin Gordon, our President and Chief Financial Officer, for 2,146,767 shares; (iii) Robert Lippe, our Chief Operations Officer, for 735,000 shares; (iv) Dr. Robert Roscigno, our Senior Vice President, Product Development, for 600,000 shares; (v) Dr. Benjamin Maynor, our Senior Vice President, Research and Development, for 700,000 shares; (vi) Jason Adair, our Vice President, Business Development and Strategy, for 350,000 shares; and (vii) Timothy Albury, our Senior Vice President, Chief Accounting Officer, for 514,000 shares.

On March 7, 2018, we also granted non-statutory stock options to four directors to purchase an aggregate of 1,810,000 shares of common stock under the 2016 Plan, with an exercise price equal to \$0.55 per share. These four grants comprised grants to: (i) Arthur Kirsch, for 135,000 shares; (ii) Dr. Seth Rudnick, for 930,000 shares; (iii) Dr. Ralph Snyderman, for 460,000 shares; and (iv) Raman Singh, for 285,000 shares.

On March 7, 2018, in connection with his employment agreement, we granted Mr. Gordon 2,146,767 restricted stock units, equal to one percent of our issued and outstanding capital stock on a fully-diluted basis on the date of grant. Further, pursuant to his employment agreement, on the date of execution of the underwriting agreement Mr. Gordon is also entitled to (i) a stock option award under the Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, or the 2018 Plan, to purchase shares of our common stock equal to 1% of our capital stock on a fully-diluted basis on the date of grant (shares assuming

we sell _____ shares in this offering) with an exercise price per share equal to the initial public offering price, and (ii) a restricted stock unit award equal to 1% of our capital stock on a fully-diluted basis on the date of grant (_____ shares assuming we sell _____ shares in this offering).

We claimed exemption from registration under the Securities Act for the sales and issuances of securities in the transactions described above under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering or under Rule 701 promulgated under the Securities Act, or Rule 701, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701.

On the date of execution of the underwriting agreement, in addition to the option to be granted to Mr. Gordon upon the closing of this offering we expect to grant, under the 2018 Plan to certain of our officers and directors, an aggregate of _____ shares of common stock issuable upon the exercise of stock options.

All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued securities described in this Item 15 included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

Item 16. Exhibits and Financial Statement Schedules.

(a) The following exhibits are filed as part of this Registration Statement:

<u>Exhibit Number</u>	<u>Description</u>
1.1*	Form of Underwriting Agreement.
3.1**	Amended and Restated Certificate of Incorporation currently in effect.
3.2	Certificate of Correction to the Amended and Restated Certificate of Incorporation currently in effect.
3.3*	Form of Amended and Restated Certificate of Incorporation, to be in effect after the consummation of this offering.
3.3**	Bylaws, as amended, currently in effect.
3.4*	Form of Amended and Restated Bylaws, to be in effect after the consummation of this offering.
4.1*	Form of Specimen Common Stock Certificate.
4.2**	2016 Letter Agreement Promissory Note, issued by the Company to The University of North Carolina at Chapel Hill on June 10, 2016, as amended on December 2, 2017.
4.3**	Form of Warrant to Purchase Shares of Series B Preferred Stock, issued by the Company on March 28, 2008.
4.4**	Form of Warrant to Purchase Shares of Series C-1 Preferred Stock, issued by the Company in January 2017 and February 2017.
4.5	Seventh Amended and Restated Investors' Rights Agreement, dated as of February 2, 2018, by and among the Company, the Investors party thereto and the Common Holders party thereto.
5.1*	Opinion of DLA Piper LLP (US).
10.1**	Liquidia Technologies, Inc. Stock Option Plan (2004), as amended, and forms of award agreements thereunder.
10.2	Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as amended, and forms of award agreements thereunder.

Exhibit Number	Description
10.3*	Liquidia Technologies, Inc. 2018 Long-Term Incentive Plan, and forms of award agreements thereunder.
10.4*	Form of Indemnification Agreement with the Company's executive officers and directors.
10.5**	Loan and Security Agreement, dated as of January 6, 2016, by and between the Company and Pacific Western Bank.
10.6**	Second Amendment to Loan and Security Agreement, dated as of October 12, 2016, by and between the Company and Pacific Western Bank.
10.7**	Third Amendment to Loan and Security Agreement, dated as of December 28, 2016, by and between the Company and Pacific Western Bank.
10.8**	Fourth Amendment to Loan and Security Agreement, dated as of March 30, 2017, by and between the Company and Pacific Western Bank.
10.9**	Fifth Amendment to Loan and Security Agreement, dated as of April 28, 2017, by and between the Company and Pacific Western Bank.
10.10**	Sixth Amendment to Loan and Security Agreement, dated as of June 14, 2017, by and between the Company and Pacific Western Bank.
10.11**	Seventh Amendment to Loan and Security Agreement, dated as of October 27, 2017, by and between the Company and Pacific Western Bank.
10.12**	Eighth Amendment to Loan and Security Agreement, dated as of November 30, 2017, by and between the Company and Pacific Western Bank.
10.13+*	Inhaled Collaboration and Option Agreement, dated as of June 15, 2012, by and between the Company and Glaxo Group Limited.
10.14+*	Amendment No. 1 to the Inhaled Collaboration and Option Agreement, dated as of May 13, 2015, by and between the Company and Glaxo Group Limited.
10.15+*	Second Amendment to the Inhaled Collaboration and Option Agreement, dated as of November 19, 2015, by and between the Company and Glaxo Group Limited.
10.16+*	Development and License Agreement, dated as of June 8, 2016, by and between the Company and G&W Laboratories, Inc.
10.17+*	Amendment 1 to the Development and License Agreement, dated as of November 8, 2016, by and between the Company and G&W Laboratories, Inc.
10.18+*	Amended and Restated License Agreement, dated as of December 15, 2008, as amended, by and between the Company and The University of North Carolina at Chapel Hill.
10.19+*	First Amendment to Amended and Restated License Agreement, dated as of June 8, 2009, by and between the Company and The University of North Carolina at Chapel Hill.
10.20*	Sixth Amendment to Amended and Restated License Agreement, dated as of June 10, 2016, by and between the Company and The University of North Carolina at Chapel Hill.
10.21+*	Manufacturing Development and Scale-up Agreement, dated as of March 19, 2012, by and between the Company and Chasm Technologies, Inc.
10.22+*	1st Amendment to Manufacturing Development and Scale-up Agreement, dated as of May 25, 2017, by and between the Company and Chasm Technologies, Inc.
10.23#	Amended and Restated Executive Employment Agreement, dated as of January 31, 2018, by and between the Company and Neal Fowler.

Exhibit Number	Description
10.24#	Executive Employment Agreement, dated as of January 22, 2018, by and between the Company and Kevin Gordon.
10.25#	Form of Amended and Restated Executive Employment Agreement to be entered into between the Company and Robert Lippe.
10.26#	Amended and Restated Executive Employment Agreement, effective January 22, 2018, by and between the Company and Timothy Albury.
10.27*	Non-Employee Director Compensation Policy.
10.28#*	Employee Bonus Plan.
10.29#*	Executive Severance and Change in Control Plan.
10.30*	Lease Agreement, dated as of April 14, 2005, by and between the Company and Technology VII-IX, LLC, as amended.
10.31*	Lease Agreement, dated as of June 29, 2007, by and between the Company and GRE Keystone Technologies One LLC, as amended.
23.1*	Consent of PricewaterhouseCoopers LLP, independent Registered Public Accounting Firm.
23.2*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
23.3*	Consent of Decision Resources Group.
24.1*	Power of Attorney (included on signature page).

* To be filed by amendment.

** Previously filed.

+ Application will be made to the Securities and Exchange Commission for confidential treatment of certain portions. Omitted material for which confidential treatment will be requested will be filed separately with the Securities and Exchange Commission.

Indicates management contract or compensatory plan.

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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 of 1933, as amended, and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) The registrant will provide to the underwriter at the closing as specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.
- (2) 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.
- (3) 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 certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Morrisville, State of North Carolina, on this day of , 2018.

By: _____
Name: Neal Fowler
Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Neal Fowler and Kevin Gordon his true and lawful attorney-in-fact, with full power of substitution and resubstitution for him and in his name, place and stead, in any and all capacities to sign any and all amendments including post-effective amendments to this registration statement (including, without limitation, any additional registration statement filed pursuant to Rule 462 under the Securities Act of 1933), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact or his substitute, each acting alone, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Name</u>	<u>Position</u>	<u>Date</u>
_____ Neal Fowler	Director and Chief Executive Officer (Principal Executive Officer)	, 2018
_____ Kevin Gordon	President and Chief Financial Officer (Principal Financial Officer)	, 2018
_____ Timothy Albury	Senior Vice President, Chief Accounting Officer (Principal Accounting Officer)	, 2018
_____ Seth Rudnick	Chairman of the Board of Directors	, 2018
_____ Stephen Bloch	Director	, 2018

<u>Name</u>	<u>Position</u>	<u>Date</u>
Edward Mathers	Director	, 2018
Isaac Cheng	Director	, 2018
Ralph Snyderman	Director	, 2018
Arthur Kirsch	Director	, 2018
Jason Rushton	Director	, 2018
Raman Singh	Director	, 2018

CERTIFICATE OF CORRECTION

OF

LIQUIDIA TECHNOLOGIES, INC.

Liquidia Technologies, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

1. The name of the corporation is Liquidia Technologies, Inc.
2. An Amended and Restated Certificate of Incorporation ("**Certificate**") was filed with the Secretary of State of the State of Delaware on February 2, 2018, and that said Certificate requires correction as permitted by Section 103 of the General Corporation Law of the State of Delaware.
3. The inaccuracy or defect of said Certificate is as follows:

Subsection B (3)(a) of Article Fourth thereof inaccurately states, due to clerical error, that (i) the current Conversion Price of the Series A Stock shall be \$0.82460, (ii) the current Conversion Price of the Series A-1 Stock shall be \$1.4067, (iii) the current Conversion Price of the Series B Stock shall be \$1.49140, (iv) the current Conversion Price of the Series C Stock shall be \$0.66938, and (v) the current Conversion Price of the Series C-1 Stock shall be \$0.66938.

4. Subsection B (3)(a) of Article Fourth of the Certificate is corrected in its entirety to read as follows:

(a) Right to Convert. 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 this Corporation or any transfer agent for such stock, into such number of fully paid and nonassessable shares of Class A Voting Common Stock as is determined by dividing the Original Issue Price for such series of Preferred Stock (determined in accordance with subsection 2(f) above) by the applicable conversion price of such series of Preferred Stock (the "**Conversion Price**") (such quotient being referred to herein as the "**Conversion Rate**"), determined as hereafter provided, in effect on the date that such holder provides written notice to this Corporation that it has elected to convert such share. The current Conversion Price of the Series A Stock shall be \$0.82674; the current Conversion Price of the Series A-1 Stock shall be \$1.41037; the current Conversion Price of the Series B Stock shall be \$1.49526; the current Conversion Price of the Series C Stock shall be \$0.67111; the current Conversion Price of the Series C-1 Stock shall be \$0.67111; and the initial Conversion Price of the Series D Stock shall be \$0.59808. The foregoing Conversion Price for each of the Series A Stock, Series A-1 Stock, Series B Stock, Series C Stock, Series C-1 Stock and Series D Stock reflects all deemed issuances of Additional Stock and reflects all prior Conversion Price adjustments and the assumed prospective issuance of \$25,500,000 of shares of Series D Stock. The Conversion Price applicable to each series of Preferred Stock set forth above shall be subject to further adjustment as set forth in this Section 3.

[signature page to follow]

IN WITNESS WHEREOF, said corporation has caused this Certificate of Correction to be executed this 7th day of March, 2018.

By: /s/ Kevin Gordon
Name: Kevin Gordon
Title: President and Chief Financial Officer

LIQUIDIA TECHNOLOGIES, INC.
SEVENTH AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

February 2, 2018

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SEVENTH AMENDED AND RESTATED
INVESTORS' RIGHTS AGREEMENT

This SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "Agreement") is made as of February 2, 2018 (the "Effective Date"), by and among Liquidia Technology, Inc., a Delaware corporation (the "Company"), the investors listed on Schedule A hereto (each of which is herein referred to as an "Investor"), and the holders of the Company's Class A Voting Common Stock, \$0.001 par value per share (the "Class A Common Stock") and/or the Company's Class B Nonvoting Common Stock, \$0.001 par value per share (the "Class B Common Stock") and, together with the Class A Common Stock, the "Common Stock") listed on Schedule B hereto (each of which is herein referred to as a "Common Holder").

RECITALS

WHEREAS, the Company, certain of the Investors (the "Prior Investors") who are holders of the Company's Series A Preferred Stock, par value \$0.001 per share (the "Series A Stock"), Series A-1 Preferred Stock, par value \$0.001 per share (the "Series A-1 Stock"), Series B Preferred Stock, par value \$0.001 per share (the "Series B Stock"), Series C Preferred Stock, par value \$0.001 per share (the "Series C Stock"), Series C-1 Preferred Stock, par value \$0.001 per share (the "Series C-1 Stock"), Series D Preferred Stock, par value \$0.001 per share (the "Series D Stock"), the Common Holders and holders of unsecured subordinated convertible promissory notes (the "Notes") issued by the Company (collectively, the "Noteholders") are parties to that certain Sixth Amended and Restated Investors' Rights Agreement, dated as of July 17, 2017 (the "Prior Agreement");

WHEREAS, the Company and certain of the Investors (the "**New Investors**") have entered into that certain Series D Preferred Stock Purchase Agreement of even date herewith (the "**Purchase Agreement**"), which provides for, among other things, the purchase by the New Investors of shares of Series D Preferred Stock of the Company (the "**Series D Stock**") and the conversion of all principal and accrued interest due under the Notes into Series D Stock as full payment due thereunder and simultaneous termination of the Notes with no further force and effect;

WHEREAS, pursuant to Section 3.11 of the Prior Agreement, upon the conversion of each Noteholder's Note, such Noteholder shall automatically become an Investor; and

WHEREAS, to induce the New Investors to enter into the Purchase Agreement and purchase shares of Series D Stock thereunder, the Company, the Prior Investors and the Common Holders desire to amend and restate the Prior Agreement in its entirety as set forth herein.

NOW, THEREFORE, in consideration of the foregoing premises and certain other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Registration Rights. The Company covenants and agrees as follows:

- 1.1 Definitions.

- (a) The term "**Act**" means the Securities Act of 1933, as amended.
- (b) The term "**Form S-3**" means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the SEC that permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.
- (c) The term "**Holder**" means any person owning or having the right to acquire Registrable Securities or any assignee thereof in accordance with Section 1.11 hereof; provided, however, that the Common Holders shall not be deemed to be Holders for purposes of Sections 1.2, 1.4, 1.12, 2.1, 2.2, 2.4 and 3.7,
- (d) The term "**Initial Offering**" means the Company's first underwritten public offering of its Common Stock under the Act.
- (e) The term "**1934 Act**" means the Securities Exchange Act of 1934, as amended.
- (f) The term "**Preferred Stock**" means the Company's Series A Stock, Series A-1 Stock, Series B Stock, Series C Stock, Series C-1 Stock and Series D Stock.
- (g) The terms "**register**," "**registered**," and "**registration**" refer to a registration effected by preparing and filing a Registration Statement in compliance with the Act, and the declaration or ordering of effectiveness of such Registration Statement.

(h) The term "**Registrable Securities**" means (i) the Class A Common Stock issuable or issued upon conversion of the Preferred Stock, (ii) the 3,146,610 shares of Common Stock issued to the Common Holders; provided, however, that such shares of Common Stock shall not be deemed Registrable Securities for the purposes of Sections 1.2, 1.4, 1.12, 2.1, 2.2, 2.4 and 3.7; (iii) any shares of Common Stock purchased or acquired by any Investor subsequent to the date hereof; (iv) shares of capital stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange for, or in replacement of, the shares referenced in clauses (i), (ii) and (iii) above; (v) shares into which the shares described in clauses (i), (iii) or (iv) above may be converted, reclassified, redesignated, subdivided, consolidated or otherwise changed; and (vi) shares of capital stock of the Company or any successor thereto received by the holders of Registrable Securities in a merger, consolidation or other reorganization of or including the Company; excluding in all cases, however, any Registrable Securities sold by a person or entity in a transaction in which his, her, or its rights under this Section 1 are not assigned. The number of shares of "Registrable Securities" outstanding shall be determined by the number of shares of Common Stock outstanding that are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities that are, Registrable Securities.

- (i) The term "**Registration Statement**" means a registration statement filed by the Company with the SEC for a public offering and sale of Registrable

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Securities or Common Stock by the Company (other than a registration statement on Form S-8 or Form S-4, or their successors, or any other form for a similar limited purpose, or any registration statement covering only securities proposed to be issued in exchange for securities or assets of another corporation).

- (j) The term "**Required Holders**" means the Holders of at least a majority of the Class A Common Stock issuable or issued upon conversion of the Series C Stock, Series C-1 Stock and Series D Stock held by all Holders.
- (k) The term "**Rule 144**" shall mean Rule 144 under the Act.
- (l) The term "**SEC**" shall mean the Securities and Exchange Commission.

- 1.2 Request for Registration.

(a) Subject to the conditions of this Section 1.2, if the Company shall receive, at any time after the earlier of (i) three years after the Effective Date or (ii) six (6) months after the effective date of the Initial Offering, a written request (a "**Registration Request**") from the Required Holders that the Company file a Registration Statement covering the registration of Registrable Securities with an anticipated aggregate offering price of at least \$10,000,000, then the Company shall, within twenty (20) days of the receipt of the Registration Request, give written notice of such request to all Holders (a "**Requested Registration Notice**"), and subject to the limitations of this Section 1.2, use all commercially reasonable efforts to effect, as soon as practicable, the registration under the Act of all Registrable Securities that the Holders request to be registered in a written request received by the Company within twenty (20) days of after receipt of the Requested Registration Notice.

(b) If the Required Holders intend to distribute the Registrable Securities covered by the Registration Request by means of an underwriting, they shall so advise the Company in the Registration Request and the Company shall include such information in the Requested Registration Notice. In such event the right of any Holder to include its 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 Required Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company (which underwriter or underwriters shall be reasonably acceptable to a majority in interest of the Required Holders). Notwithstanding any other provision of this Section 1.2, if the underwriter advises the Company that marketing factors require a limitation on the number of securities underwritten (including Registrable Securities), then the Company shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the number of shares that may be included in the underwriting shall be allocated to the Holders of such Registrable Securities pro rata based on the number of Registrable Securities held by all such Holders (including the Required Holders). In no event shall any Registrable Securities be excluded from such underwriting unless all other securities are first excluded. Any Registrable Securities excluded or withdrawn from such underwriting shall be withdrawn from the registration.

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- (c) Notwithstanding the foregoing, the Company shall not be required to effect a registration pursuant to this Section 1.2:

- (i) in any particular jurisdiction in which the Company would be required to execute a general consent to service of process in effecting such registration, unless the Company is already subject to service in such jurisdiction and except as may be required under the Act; or

- (ii) after the Company has filed two (2) Registration Statements pursuant to this Section 1.2, and such Registration Statements have been declared or ordered effective and have remained effective for the time period required by Section 1.5(a)(i) below; or

(iii) during the period starting with the date sixty (60) days prior to the Company's good faith estimate of the date of the filing of and ending on a date one hundred eighty (180) days following the effective date of a Company-initiated registration subject to Section 1.3 below, provided that the Company is actively employing in good faith all commercially reasonable efforts to cause such Registration Statement to become effective; or

(iv) if the Required Holders propose to dispose of Registrable Securities that may be registered on Form S-3 pursuant to Section 1.4 hereof; or

(v) if the Company shall furnish to Holders requesting a Registration Statement pursuant to this Section 1.2 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board 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 stockholders for such Registration Statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the request of the Required Holders, provided that such right shall be exercised by the Company not more than once in any twelve (12)-month period and provided further that the Company shall not register any securities for the account of itself or any other stockholder during such ninety (90) day period (other than a registration relating solely to the sale of securities of participants in a Company stock plan, a registration relating to a corporate reorganization or transaction under Rule 145 of the Act, or a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered).

1.3 Company Registration.

(a) If the Company proposes to register (including for this purpose a registration effected by the Company for stockholders including the Holders pursuant to Section 1.2) any of its stock or other securities under the Act in connection with the public offering of such securities (other than a registration relating solely to the sale of securities of participants in a Company stock plan, a registration relating to a corporate reorganization or transaction under Rule 145 of the Act or a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered), the Company shall, at such time, promptly give each Holder written notice of such registration (a "**Company Registration Notice**"). Upon the written request of each Holder given within

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twenty (20) days after receipt of the Company Registration Notice, the Company shall, subject to the provisions of Section 1.3(c), use all commercially reasonable efforts to cause to be registered under the Act all of the Registrable Securities that each such Holder requests to be registered.

(b) Right to Terminate Registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 1.3 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration. The expenses of such withdrawn registration shall be borne by the Company in accordance with Section 1.7 hereof

(c) 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 this 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 the Company (or by other persons entitled to select the underwriters) and enter into an underwriting agreement in customary form with such 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 stockholders 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, that the underwriters determine in their sole discretion will not jeopardize the success of the offering. In no event shall any Registrable Securities be excluded from such offering unless all other stockholders' securities have been first excluded. Notwithstanding any other provision of this Agreement, if the underwriter determines in good faith that marketing factors require a limitation of the number of shares to be underwritten, the number of shares that may be included in the underwriting shall be allocated, first, to the Company; second, to the Holders other than the Common Holders on a *pro rata* basis based on the total number of Registrable Securities held by the Holders other than the Common Holders; third, to the Common Holders on a *pro rata* basis based on the total number of Registrable Securities held by the Common Holders and fourth, to any stockholder of the Company other than a Holder and/or Common Holder on a *pro rata* basis. Notwithstanding the foregoing, in no event shall (i) the amount of securities of the selling Holders included in the offering be reduced below twenty-five percent (25%) 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 Holders may be excluded if the underwriters make the determination described above and no other stockholder's securities are included in such offering or (ii) any securities held by a party other than a Holder, including for this purpose any securities held by a Common Holder, be included in such offering if any Registrable Securities held by a Holder requesting registration are excluded from such offering. For purposes of the preceding sentence concerning apportionment, for any selling stockholder that is a Holder of Registrable Securities and that is a venture capital fund, partnership or corporation, the affiliated venture capital funds, partners, retired partners and stockholders 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 Holder," and any *pro rata* reduction with respect to such "selling Holder" shall be based upon the aggregate amount of Registrable Securities owned by all such related entities and individuals.

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1.4 Form S-3 Registration. In case the Company shall receive from the Holders of Registrable Securities (for purposes of this Section 1.4, the "**Required Holders**") 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 (an "**S-3 Registration Request**"), the Company shall:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders (an "**S-3 Registration Notice**"); and

(b) use all commercially reasonable efforts to effect, as soon as practicable, 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 Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holders joining in such request as are specified in a written request given within twenty (20) days after receipt of the S-3 Registration Notice; 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 \$5,000,000;

(iii) if the Company shall furnish to Holders requesting a Registration Statement pursuant to this Section 1.4 a certificate signed by the Company's Chief Executive Officer or Chairman of the Board 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 stockholders for such Registration Statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the S-3 Registration Request, provided that such right shall be exercised by the Company not more than once in any twelve (12)-month period and provided further that the Company shall not register any securities for the account of itself or any other stockholder during such ninety (90) day period (other than a registration relating solely to the sale of securities of participants in a Company stock plan, a registration relating to a corporate reorganization or transaction under Rule 145 of the Act or a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered);

(iv) if the Company has, within the twelve (12) month period preceding the date of such request, already filed two (2) Registration Statements on Form S-3 for the Holders pursuant to this Section 1.4, and such Registration Statements have been declared or ordered effective and have remained effective for the time period required by Section 1.5(a) (i) below; or

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(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 unless the Company is already subject to service in such jurisdiction and except as may be required under the Act.

(c) If the Required 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 1.4 and the Company shall include such information in the written notice referred to in Section 1.4(a). The provisions of Section 1.2(b) shall be applicable to such request (with the substitution of Section 1.4 for references to Section 1.2).

(d) 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 Required Holders. Registrations effected pursuant to this Section 1.4 shall not be counted as requests for registration effected pursuant to Sections 1.2.

1.5 Obligations of the Company.

(a) Whenever required under this Section 1 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(i) prepare and file with the SEC a Registration Statement with respect to such Registrable Securities, use all commercially reasonable efforts to cause such Registration Statement to become effective, and keep such Registration Statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the Registration Statement has been completed;

(ii) 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 Act with respect to the disposition of all securities covered by such Registration Statement;

(iii) furnish to the Holders such number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them;

(iv) use all commercially reasonable 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;

(v) 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;

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(vi) 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 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;

(vii) furnish, on the date that such Registrable Securities are delivered to the underwriters for sale, if such securities are being sold through underwriters (a) an opinion, dated as of 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, if any, and to each selling holder of Registrable Securities covered by such Registration Statement and (b) a letter dated as of 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 and to each selling holder of Registrable Securities covered by such Registration Statement;

(viii) cause all such Registrable Securities registered pursuant to this Section 1 to be listed on a national exchange or trading system and on each securities exchange and trading system on which similar securities issued by the Company are then listed; and

(ix) 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.

(b) In the event of any delay in filing or the suspension of effectiveness or use of any registration statement pursuant to this Section 1.5, the applicable time period during which such Registration Statement is to remain effective or updated shall be extended by that number of days equal to the number of days the filing, effectiveness, or use of such Registration Statement was suspended.

1.6 Information from Holder. 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 reasonably required to effect the registration of such Holder's Registrable Securities.

1.7 Expenses of Registration. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Sections 1.2, 1.3 and 1.4, 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 of one counsel for the selling Holders (not to exceed \$50,000) shall be borne by the Company. Notwithstanding the foregoing, the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 1.2 or Section 1.4 if the registration request is subsequently withdrawn at the request of the Holders of

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a majority of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses pro rata in proportion to the number of Registrable Securities that were to be included in the withdrawn registration), unless, in the case of a registration requested under Section 1.2, the Holders of a majority of the Registrable Securities agree to forfeit their right to one demand registration pursuant to Section 1.2; provided, however, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Section 1.2.

1.8 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.

1.9 Indemnification. In the event any Registrable Securities are included in a Registration Statement:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, the partners, officers, directors and stockholders of each Holder, legal counsel and accountants for each Holder, any underwriter (as defined in the Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Act or the 1934 Act, against any losses, claims, damages or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act, or such state securities laws, common law or otherwise, 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, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state in such Registration Statement 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 Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws or otherwise in connection with the offering related to such Registration Statement; and the Company will reimburse each such Holder, underwriter, controlling person or other aforementioned person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the indemnity agreement contained in this subsection 1.9(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 in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation that occurs in reliance upon and in conformity with written information furnished to the Company in writing expressly for use in connection with such registration by the Holder, underwriter, controlling person or other aforementioned person seeking indemnification under this subsection 1.9(a); and provided further, that the foregoing indemnity agreement with respect

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to any preliminary prospectus shall not inure to the benefit of any Holder or underwriter or other aforementioned person, or any person controlling such Holder or underwriter, from whom the person asserting any such losses, claims, damages or liabilities purchased shares in the offering, if a copy of the most current prospectus was not sent or given by or on behalf of such Holder or underwriter or other aforementioned person to such person, if required by law to have been so delivered, at or prior to the written confirmation of the sale of the shares to such person, and if the prospectus (as so amended or supplemented) would have cured the defect giving rise to such loss, claim, damage or liability.

(b) To the extent permitted by law, each selling Holder (severally, and not jointly) 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 Act, legal counsel and accountants for the Company, 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 Act, the 1934 Act, any state securities laws or any rule or regulation promulgated under the Act, the 1934 Act or any state securities laws, common law or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any Violation or otherwise in connection with the offering related to such Registration Statement, in each case to the extent (and only to the extent) that the foregoing 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 reimburse any person intended to be indemnified pursuant to this subsection 1.9(b) for any legal or other expenses reasonably incurred by such person in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the indemnity agreement contained in this subsection 1.9(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); and provided further, that in no event shall any indemnity under this subsection 1.9(b) exceed the net proceeds from the offering received by such Holder.

(c) Promptly after receipt by a party entitled to indemnification under this Section 1.9 (an “**Indemnified Party**”) 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 party required to provide indemnification under this Section 1.9 (an “**Indemnifying Party**”), deliver to the Indemnifying Party a written notice of the commencement thereof. 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 that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the 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

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action, if prejudicial to its ability to defend such action, shall relieve such Indemnifying Party of liability to the Indemnified Party under this Section 1.9 to the extent of such prejudice, but the omission to so 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 1.9. No Indemnifying Party in the defense of any claim or action shall consent to entry of any judgment without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld) and no Indemnified Party shall consent to entry of any such judgment without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld). Each Indemnified Party shall furnish such information regarding itself or the claim in question as an Indemnifying Party may reasonably request in writing and as shall be reasonably required in connection with the defense of such claim and action resulting therefrom.

(d) If the indemnification provided for in this Section 1.9 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 herein, 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 the Indemnified Party on the other hand 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, however, that no contribution by any Holder, when combined with any amounts paid by such Holder pursuant to Section 1.9(b), shall exceed the net proceeds from the offering received by such Holder. The relative fault of the Indemnifying Party and 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 or alleged 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) The obligations of the Company and Holders under this Section 1.9 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 1 and otherwise.

1.10 Reports Under the 1934 Act. With a view to making available to the Holders the benefits of Rule 144 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 Rule 144, at all times after the effective date of the Initial Offering;
- (b) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act; and
- (c) 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 Rule 144 (at any time after ninety (90) days after the effective

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date of the first registration statement filed by the Company), the Act and the 1934 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 to avail any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration or pursuant to such form.

1.11 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 of such securities that (i) is a subsidiary, affiliate, parent, partner, stockholder, limited partner, member, retired partner or retired member of a Holder, (ii) is a Holder’s family member or trust for the benefit of an individual Holder, or (iii) after such assignment or transfer, holds at least two percent (2%) of all then outstanding Registrable Securities, provided: (a) 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; (b) such transferee or assignee agrees in writing to be bound by and subject to the terms and conditions of this Agreement, including, without limitation, the provisions of Section 1.13 below; and (c) such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act.

1.12 Limitations on Subsequent Registration Rights. From and after the Effective Date, the Company shall not, without the prior written consent of the Required Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (a) to include any of such securities in any registration filed under Section 1.2, Section 1.3 or Section 1.4 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 such securities will not reduce the amount of the Registrable Securities of the Holders that are included or (b) to demand registration of their securities.

1.13 “Market Stand-Off” Agreement. Solely in connection with the Initial Offering, the Holders, if requested by the Company and the managing underwriter of such Initial Offering pursuant to a Registration Statement, shall agree not to sell publicly or otherwise transfer or dispose of any Registrable Securities or other securities of the Company held by such Holders for a specified period of time (not to exceed the lesser of the then-customary lock up period or 180 days following the effective date of the Registration Statement related to the Initial Offering) as long as all executive officers and directors of the Company and holders of the Company’s securities representing more than 1% of the Company’s outstanding shares of Common Stock (calculated on a fully-diluted basis) enter into similar agreements; provided that all restrictions set forth in this Section 1.13 on all such Holders shall terminate and be of no further force or effect if any other Holder or any officer, director or other such holder is released from, or otherwise no longer bound by, such agreement or restrictions. The Company shall place a legend on each certificate representing Registrable Securities that such Registrable Securities are subject to the “market stand-off” restrictions set forth in this Agreement.

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1.14 **Termination of Registration Rights.** No Holder shall be entitled to exercise any right provided for in this Section 1 (i) after five (5) years following the consummation of the Qualified Public Offering (as defined in the Company's Restated Certificate (as defined below)), (ii) as to any Holder, such earlier time after the Initial Offering at which such Holder can sell all Registrable Securities held by such Holder (together with any affiliate of the Holder with whom such Holder must aggregate its sales under Rule 144) in a single three (3)-month period without registration in compliance with Rule 144 or (iii) after the consummation of a Liquidation Event (as such term is defined in the Restated Certificate, a "**Liquidation Event**").

2. **Covenants of the Company.**

2.1 **Delivery of Financial Statements.** The Company shall, upon request, deliver to each Investor (or transferee of an Investor) that holds at least 300,000 shares (subject to appropriate adjustment for stock splits, stock dividends, combinations or the like) of the Preferred Stock (a "**Major Investor**"):

(a) as soon as practicable, but in any event within one hundred fifty (150) days after the end of each fiscal year of the Company, consolidated and consolidating income statements for the Company and its subsidiaries for such fiscal year, consolidated and consolidating balance sheets of the Company and its subsidiaries, consolidated and consolidating statements of stockholders' equity for the Company and its subsidiaries as of the end of such year, and consolidated and consolidating statements of cash flows for the Company and its subsidiaries 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 independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each quarter of each fiscal year of the Company, consolidated and consolidating unaudited income statements for the Company and its subsidiaries, consolidated and consolidating statements of cash flows for the Company and its subsidiaries for such fiscal quarter and consolidated and consolidating unaudited balance sheets for the Company and its subsidiaries as of the end of such fiscal quarter;

(c) within thirty (30) days of the end of each month, consolidated and consolidating unaudited income statements and statements of cash flows for the Company and its subsidiaries and consolidated and consolidating balance sheets for the Company and its subsidiaries for and as of the end of such month, in reasonable detail and compared against the then current budget for the Company and its subsidiaries;

(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 next fiscal year for the Company and its subsidiaries, prepared on a monthly basis, including consolidated and consolidating balance sheets, income statements and statements of cash flows for such months and, as soon as prepared, any other budgets or revised budgets prepared by the Company; and

(e) as soon as practicable, but in any event at least sixty (60) days after the end of each fiscal year, a report and analysis from the Company's Chief Executive

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any variance between the actual performance by the Company and its subsidiaries for such fiscal year and the budget for the Company and its subsidiaries for such fiscal year.

2.2 **Inspection.** The Company shall permit each Major Investor, at such Major Investor'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 Major Investor; provided, however, that the Company shall not be obligated pursuant to this Section 2.2 to provide access to any information that it reasonably considers to be a trade secret or similar confidential information. The provisions of this Section 2.2 shall not amend or alter any obligation of any Major Investor or the Company to exchange information, including trade secrets and confidential information, under any other agreement between a Major Investor and the Company.

2.3 **Termination of Information and Inspection Covenants.** The covenants set forth in Sections 2.1 and 2.2 shall terminate and be of no further force or effect upon the earliest to occur of (i) the consummation of a Qualified Public Offering, as that term is defined in the Company's Amended and Restated Certificate of Incorporation (as amended from time to time, the "**Restated Certificate**"), (ii) when the Company first becomes subject to the periodic reporting requirements of Sections 12(g) or 15(d) of the 1934 Act, whichever event shall first occur or (iii) the consummation of a Liquidation Event other than an Asset Sale (as such term is defined in the Restated Certificate).

2.4 **Right of First Refusal.** Subject to the terms and conditions specified in this Section 2.4, the Company hereby grants to each Major Investor a right of first refusal with respect to each issuance by the Company of its Shares (as hereinafter defined). For purposes of this Section 2.4, the term "**Major Investor**" includes any general partners and affiliates of a Major Investor. A Major Investor shall be entitled to apportion the right of first refusal hereby granted it among itself and its partners and affiliates in such proportions as it deems appropriate.

Each time the Company proposes to offer or issue any shares of, or securities convertible into or exchangeable or exercisable for any shares of, its capital stock or any shares of phantom stock or stock appreciation rights ("**Shares**"), the Company shall first make an offering of such Shares to each Major Investor in accordance with the following provisions:

(a) The Company shall deliver a notice in accordance with Section 3.5 ("**First Refusal 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 upon which it proposes to offer such Shares. If the consideration to be paid by others for such Shares is not cash, the fair market value of the consideration shall be determined in good faith by the Company's Board of Directors and a reasonably detailed explanation of such determination of such value shall be included in the First Refusal Notice. All Major Investors electing to participate in the purchase of such Shares shall be entitled to pay the cash equivalent thereof as so determined.

(b) By written notification received by the Company within twenty (20) calendar days after the giving of a First Refusal Notice, each Major Investor may elect to purchase, at the price and on the terms specified in the First Refusal Notice, up to that portion of

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such Shares that equals the proportion that the number of shares of Common Stock (as to each Major Investor, its "**Pro Rata Portion**") held by such Major Investor (assuming full conversion or exercise of all convertible or exercisable securities then held by such Major Investor and the satisfaction of all conditions precedent to convertibility or exercisability) bears to the total number of shares of Common Stock of the Company then outstanding (assuming full conversion and exercise of all convertible and exercisable securities then outstanding and the satisfaction of all conditions precedent to convertibility or exercisability). The Company shall promptly, in writing, inform each Major Investor that elects to purchase its full Pro Rata Portion of all the Shares available to it (a "**Fully-Exercising Investor**") of any other Major Investor's failure to do likewise. During the ten (10) day period commencing after such information is given, each Fully-Exercising Investor may elect to purchase that portion of the Shares for which Major Investors were entitled to subscribe, but which were not subscribed for by the Major Investors, which is equal to the proportion that the number of shares of Common Stock held by such Fully-Exercising Investor (assuming full conversion or exercise of all convertible or exercisable securities then held by such Fully-Exercising Investor and the satisfaction of all conditions precedent to convertibility or exercisability) bears to the total number of shares of Common Stock held by all Fully-Exercising Investors who wish to purchase such unsubscribed shares (assuming full conversion or exercise of all convertible or exercisable securities then held by all such Fully-Exercising Investors and the satisfaction of all conditions precedent to convertibility or exercisability).

(c) If all Shares that Major Investors are entitled to obtain pursuant to subsection 2.4(b) are not elected to be obtained as provided in subsection 2.4(b) hereof, the Company may, during the ninety (90) day period following the expiration of the final period provided in subsection 2.4(b) hereof, offer the remaining unsubscribed portion of such Shares to any person or persons at a price not less than that, and upon terms no more favorable to the offeree than those, specified in the First Refusal Notice. 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 sixty (60) 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.

(d) The right of first refusal in this Section 2.4 shall not be applicable to (i) the issuance or sale of shares of Common Stock (or options exercisable for shares of Common Stock) to employees, directors, consultants and other service providers under the Company's 2004 Stock Option Plan, as amended, or the Company's 2016 Equity Incentive Plan, as amended, for the primary purpose of soliciting or retaining their services pursuant to plans or agreements approved by the Company's Board of Directors; (ii) the issuance of securities pursuant to a Qualified Public Offering, as that term is defined in the Restated Certificate; (iii) the issuance of securities pursuant to the conversion or exercise of convertible or exercisable securities outstanding on the Effective Date or previously issued in a transaction to which the terms of this Section 2.4 were complied with; (iv) securities issued in connection with a bona fide business acquisition of another business entity by the Company other than for financing purposes, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise, provided that such transaction is approved by the Company's Board of Directors; (v) the issuance of securities issued or issuable pursuant to the exercise of warrants, options or other rights granted in connection with any loan arrangement, equipment lease, technology

license, vendor or customer relationship or similar non-equity financing transaction approved by the Board of Directors, provided, that the aggregate number of shares of capital stock of the Company issued or issuable pursuant to this clause (v) may not exceed 400,000 shares of Common Stock (subject to appropriate adjustment for stock splits, stock dividends, combinations or the like) (on a Common Stock equivalent basis); (vi) the issuance of any securities which, with the unanimous approval of the Board, are not offered to any existing shareholders or their affiliates, (vii) the issuance of any securities in connection with a stock split or dividend by the Company or (viii) the issuance of up to 137,423,317 shares of Series D Stock under the Purchase Agreement. In addition to the foregoing, the right of first refusal in this Section 2.4 shall not be applicable with respect to any Major Investor in any subsequent offering of Shares if (i) at the time of such offering, the Major Investor is not an "accredited investor," as that term is then defined in Rule 501(a) of the Act and (ii) such offering of Shares is otherwise being offered only to accredited investors.

(e) The rights provided in this Section 2.4 may not be assigned or transferred by any Major Investor; provided, however, that a Major Investor that is a venture capital fund may assign or transfer such rights to an affiliated venture capital fund.

(f) The covenants set forth in this Section 2.4 shall terminate and be of no further force or effect upon the consummation of (i) a Qualified Public Offering, as that term is defined in the Restated Certificate, or (ii) a Liquidation Event other than an Asset Sale (as such term is defined in the Restated Certificate).

2.5 Observer Rights.

(a) As long as the Bill and Melinda Gates Foundation ("**Foundation**") owns not less than 412,000 shares of Series C-1 Stock (or an equivalent amount of Class A Common Stock issued or issuable upon conversion thereof and, in any event, subject to appropriate adjustment for stock splits, stock dividends, combinations or the like), the Company and its majority-owned subsidiaries shall invite a representative of Foundation to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall provide copies of all minutes and consents of such Board of Directors to such representative; provided, however, that such representative shall agree to hold such information in confidence and trust; and, provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets or a conflict of interest.

(b) As long as Canaan VIII L.P. ("**Canaan**") owns not less than 250,000 shares of Series C Stock (or an equivalent amount of Class A Common Stock issued or issuable upon conversion thereof and, in any event, subject to appropriate adjustment for stock splits, stock dividends, combinations or the like), the Company and its majority-owned subsidiaries shall invite a representative of Canaan to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall provide copies of all minutes and consents of such Board of Directors to such representative; provided, however, that such representative shall agree to hold such information in confidence and trust; and, provided

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further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets.

(c) As long as New Enterprise Associates 12, Limited Partnership, together with its affiliates, ("**NEA**") owns not less than 250,000 shares of Series B Stock (or an equivalent amount of Class A Common Stock issued or issuable upon conversion thereof and, in any event, subject to appropriate adjustment for stock splits, stock dividends, combinations or the like), the Company shall provide copies of all minutes and consents of the Company's Board of Directors to NEA; provided, however, that such representative shall agree to hold such information in confidence and trust; and, provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets.

(d) As long as A.M. Pappas Life Science Ventures IV, L.P. ("**Pappas**") owns not less than 250,000 shares of Series C Stock (or an equivalent amount of Class A Common Stock issued or issuable upon conversion thereof and, in any event, subject to appropriate adjustment for stock splits, stock dividends, combinations or the like), the Company and its majority-owned subsidiaries shall invite a representative of Pappas to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall provide copies of all minutes and consents of such Board of Directors to such representative; provided, however, that such representative shall agree to hold such information in confidence and trust; and, provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets.

(e) As long as (I) Glaxo Group Limited ("**GSK**") owns shares of Series C-1 Stock or Series D Stock (or shares of Class A Common Stock issued upon conversion thereof) that constitute at least 2.0% of the total number of shares of Class A Common Stock of the Company on a fully diluted and as-converted basis, and (II) GSK continues to have the right to exercise at least one of the Options (defined below) or has exercised an Option, (A) the Company and its majority-owned subsidiaries shall provide copies of financial reports and other management presentations to the Company's Board of Directors (or to the Board of Directors of its majority-owned subsidiaries) and (B) the Company shall make available the Company's chief executive officer and chief financial officer at mutually acceptable times/locations (including by telephonic means) with representative(s) of GSK at least once per calendar quarter upon reasonable prior notice from GSK; provided, however, that GSK shall agree to hold such information in confidence and trust; and, provided further, that the Company reserves the right to withhold any information if access to such information could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets or a conflict of interest. The "Options" mean any of the Liquidia Respiratory Option or the Inhaled Option, as such terms are defined in the Inhaled Collaboration Agreement between GSK and the Company entered into on or about June 15, 2012 or the Vaccine Option, the Conjugation-by-Proxy Option,

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the Right of First Refusal for Liquidia Live Replication Virus Vaccine, the Liquidia Pneumo Vaccine Option or the Liquidia Malaria Vaccine Option as such terms are defined in the Vaccines Collaboration Agreement between GSK and the Company entered into on or about June 15, 2012. The rights in this Section 2.5(e) are personal to GSK and shall in no event be assignable to any person or entity without the express consent of the Company as may be determined in its sole discretion.

(f) As long as Xeraya LT Ltd, a Cayman Islands company ("**Xeraya**"), owns any shares of Series D Stock (or any shares of Class A Common Stock issued upon conversion thereof), the Company and its majority-owned subsidiaries shall invite a representative of Xeraya to attend all meetings of its Board of Directors in a nonvoting observer capacity and, in this respect, shall provide copies of all minutes and consents of such Board of Directors to such representative; provided, however, that such representative shall agree to hold such information in confidence and trust; and, provided further, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or would result in disclosure of trade secrets.

2.6 Proprietary Information and Inventions Agreements. The Company shall require all employees and consultants of the Company and its majority-owned subsidiaries with access to confidential information to execute and deliver a Proprietary Information and Inventions Agreement in substantially the form included in Section 2.13 of the Disclosure Schedules to the Purchase Agreement.

2.7 Employee Agreements. Unless approved by the Board of Directors of the Company, all future employees of the Company and its majority-owned subsidiaries who shall purchase, or receive options to purchase, shares of the Company's Common Stock following the date hereof shall be required to execute stock purchase or option agreements providing for (i) vesting of shares over a four-year period with the first 25% of such shares vesting following twelve (12) months of continued employment or services, and the remaining shares vesting in equal monthly installments over the following 36 months thereafter and (ii) a 180-day lockup period in connection with the Company's initial public offering. The Company shall retain a right of first refusal on transfers of such shares and options until the Company's initial public offering and the right to repurchase unvested shares at cost.

2.8 Board Expenses. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors (including committees thereof) of the Company and each majority-owned subsidiary or in connection with other activities engaged in by such directors at the request of the Company or such subsidiary.

2.9 Scientific Advisory Board. As long as Canaan owns not less than 250,000 shares of Series C Stock (or an equivalent amount of Class A Common Stock issued or issuable upon conversion thereof and, in any event, subject to appropriate adjustment for stock splits, stock dividends, combinations or the like), the Company and each of its majority-owned subsidiaries shall invite a representative of Canaan to participate as a member of its Scientific

Advisory Board and shall reimburse such representative for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of such Scientific Advisory Boards or in connection with other activities engaged in by such representative at the request of the Company or such subsidiary.

2.10 Spin-Offs. The Company may develop a plan for assigning, licensing and/or sublicensing rights and assets to one or more separate wholly-owned subsidiaries formed for such purpose (each, a "SpinCo"). If the Company transfers or otherwise distributes the equity interests of any SpinCo to the stockholders of the Company (through a dividend, distribution or otherwise), as a condition precedent to each such transaction, (i) such transfer or distribution shall have been approved by the Company's Board of Directors and the requisite holders of Preferred Stock under the Restated Certificate, (ii) the equity interests shall be transferred or distributed to the holders of Common Stock and Preferred Stock based on the number of shares of Common Stock then held by each such holder (with the holders of Preferred Stock being treated as the holder of the number of shares of Common Stock into which such Preferred Stock is then convertible), and (iii) the Company shall have used its commercially reasonable efforts to minimize the tax impact of such transfer or distribution to its stockholders to the greatest extent possible.

2.11 Insurance. Each of the Company and its majority-owned subsidiaries shall maintain general liability and directors' and officers' liability insurance policies in each such case on terms and conditions that are acceptable to the board of directors of the Company and such subsidiary.

2.12 Reservation of Common Stock. The Company shall at all times reserve and keep available, solely for issuance and delivery upon the conversion of the Preferred Stock, all Class A Common Stock issuable from time to time upon such conversion.

2.13 Directors' Liability and Indemnification. The Company's and each of its majority-owned subsidiaries' certificate of incorporation, bylaws, articles of association and other organizational documents shall provide (a) for elimination of the liability of directors to the maximum extent permitted by law and (b) for indemnification of directors for acts on behalf of the Company and its majority-owned subsidiaries to the maximum extent permitted by law.

2.14 Qualified Small Business Stock. The Company will use commercially reasonable efforts to cause the Preferred Stock to qualify as "Qualified Small Business Stock" under Section 1202 of the Internal Revenue Code of 1986, as amended. The Company will use commercially reasonable efforts to comply with the reporting and record keeping requirements of Section 1202 of the Internal Revenue Code of 1986, as amended, any regulations promulgated thereunder and any similar state laws and regulations and to not repurchase any stock of the Company if such repurchase would cause such shares not to so qualify as "Qualified Small Business Stock."

2.15 Board of Director Approval. The Company shall not, and shall not permit any majority-owned subsidiary to, without the approval of a majority of the Company's Board of Directors: (a) incur indebtedness, except in the ordinary course of business, or prepay any outstanding indebtedness, (b) make any loan or advance to an employee, except in the ordinary course of business as part of travel advances or similar expense advances, (c) guarantee any

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indebtedness or obligation of any other party, except in the ordinary course of business, (d) make any material change in the nature of its business as presently conducted or presently contemplated to be conducted, (e) approve or pay any (i) discretionary or performance bonus or award to any executive officer of the Company or any majority-owned subsidiary thereof or (ii) severance or other similar payment upon termination of any relationship with the Company to any executive officer of the Company or any majority-owned subsidiary thereof, (f) hire any executive level employee, (g) lease or purchase real estate property, (h) approve any stock option or incentive stock grant or purchase or (i) enter into any obligation or commitment in excess of \$250,000.

2.16 Subsidiaries. The Company will not, without the approval of the Company's Board of Directors: (a) organize or acquire any entity that is a subsidiary unless such subsidiary is wholly-owned by the Company, (b) permit any majority-owned subsidiary to consolidate or merge into or with any entity or sell or transfer all or substantially all its assets, except that the Company may permit a subsidiary to consolidate or merge into or with or sell or transfer assets to any other subsidiary or (c) sell or otherwise transfer any shares of capital stock of any subsidiary or other equity securities of any entity, except to the Company or another subsidiary, or permit any majority-owned subsidiary to issue, sell or otherwise transfer any shares of its capital stock or the capital stock of any subsidiary or other equity securities of any entity or to sell all or substantially all of such subsidiary's assets, except to the Company or another subsidiary.

2.17 Convertible Securities. Unless approved by a majority of the Company's Board of Directors, the Company shall not issue or sell any securities convertible into, or exchangeable or exercisable for, any shares of its capital stock other than shares of Preferred Stock, unless the terms of such securities provide that such securities terminate in their entirety at the time of a Liquidation Event if they are not converted into, or exchanged or exercised for, shares of the Company's capital stock immediately prior to such Liquidation Event

2.18 Indemnification Matters. The Company hereby acknowledges that one or more of its directors may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to any such director are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such director are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by any such director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such director to the extent legally permitted and as required by the Certificate of Incorporation or Bylaws of the Company (or any agreement between the Company and such director), without regard to any rights such director may have against the Fund Indemnitors, and, (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of any such director with respect to any claim for which such director has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of

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contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such director against the Company.

2.19 Termination of Certain Covenants. The covenants set forth in Sections 2.4 through 2.17 shall terminate and be of no further force or effect upon the consummation of (i) a Qualified Public Offering, as that term is defined in the Restated Certificate, or (ii) a Liquidation Event other than an Asset Sale, as such term is defined in the Restated Certificate.

3. Miscellaneous.

3.1 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including transferees of any shares of Registrable Securities). 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.

3.2 Governing Law. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents entered into and to be performed entirely within Delaware.

3.3 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.

3.4 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.

3.5 Notices. All notices and other communications given or made pursuant hereto shall be in writing and shall be deemed effectively given: (i) upon personal delivery to the party to be notified, (ii) when sent by confirmed facsimile if sent during normal business hours of the recipient; if not, then on the next business day, (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (iv) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt; provided that, notwithstanding the foregoing, no notice or communication may be effectively given under this Agreement by registered or certified mail to Morningside Venture Investments Limited and notice and communication shall only be effectively given by a nationally recognized overnight courier to Morningside Venture Investments Limited three (3) days

after deposit with such courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the respective parties at the addresses set forth on the signature pages attached hereto (or at such other addresses as shall be specified by notice effectively given in accordance with this Section 3.5).

3.6 Expenses. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable

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attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

3.7 Entire Agreement; Termination of Prior Agreement; Amendments and Waivers. This Agreement (including the Exhibits hereto, if any) constitutes the full and entire understanding and agreement among the parties with regard to the subjects hereof and thereof. Upon the execution and effectiveness of this Agreement, the Prior Agreement shall be terminated and of no further force or effect. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Required Holders; provided, however, that in the event that such amendment or waiver adversely affects the obligations or rights of a Holder in a different manner than the other Holders, such amendment or waiver shall also require the written consent of the holders of a majority in interest of the adversely affected Holders. Notwithstanding the foregoing, (a) the provisions of Section 2.5(a) and this subsection (a) of this sentence of Section 3.7 may be amended and the observance of any term thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of Foundation; (b) the provisions of Section 2.5(b) and this subsection (b) of this sentence of Section 3.7 may be amended and the observance of any term thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of Canaan; (c) the provisions of Section 2.5(c) and this subsection (c) of this sentence of Section 3.7 may be amended and the observance of any term thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of NEA; (d) the provisions of Section 2.5(d) and this subsection (d) of this sentence of Section 3.7 may be amended and the observance of any term thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of Pappas; and (e) the provisions of Section 2.5(f) and this subsection (e) of this sentence of Section 3.7 may be amended and the observance of any term thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of Xeraya. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each Investor, each Common Holder, each holder of Registrable Securities, each future holder of Registrable Securities and the Company.

3.8 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision(s) shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision(s) were so excluded and shall be enforceable in accordance with its terms.

3.9 Aggregation of Stock. All shares of Registrable Securities held or acquired by affiliated entities (including affiliated venture capital funds) or persons shall be aggregated together for the purpose of determining the availability of any rights under this Agreement.

3.10 Amendment of Prior Agreement. The Prior Agreement is hereby amended and superseded in its entirety and restated herein. Such amendment and restatement is effective upon the execution of this Agreement by the Company and the parties required for an amendment pursuant to Section 3.7 of the Prior Agreement. Upon such execution, all provisions

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of, rights granted and covenants made in the Prior Agreement are hereby waived, released and superseded in their entirety by the provisions hereof and shall have no further force or effect. Each of the Company, the Common Holders and the Investors hereby expressly consents and agrees to this amendment and restatement of the Prior Agreement.

[The remainder of this page is intentionally left blank.]

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Neal Fowler
Name: Neal Fowler
Title: Chief Executive Officer

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

ALEXANDRIA VENTURE INVESTMENTS, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, INC., a Maryland corporation, managing member

By: /s/ Aaron Jacobson
Name: Aaron Jacobson
Title: VP – Corporate Counsel

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

ALWP CAPITAL SPC LTD - ALWP DIVERSIFIED SEGREGATED PORTFOLIO FUND

By: /s/ Leonardo Drago
Name: Leonardo Drago
Title: Chief Investment Officer

ALWP CAPITAL SPC LTD - ALWP CAPITAL GROWTH SEGREGATED PORTFOLIO FUND

By: /s/ Leonardo Drago
Name: Leonardo Drago
Title: Chief Investment Officer

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

AMEREUS GROUP PTE LTD

By: /s/ Zhang Xueqi
Name: Zhang Xueqi
Title: Director

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

A.M. PAPPAS LIFE SCIENCE VENTURES IV, L.P.

By: AMP&A Management IV, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Partner & CFO

INVESTOR:

PV IV CEO FUND, L.P.

By: AMP&A Management IV, LLC
Its: General Partner

By: /s/ Ford S. Worthy
Name: Ford S. Worthy
Title: Partner & CFO

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

BILL & MELINDA GATES FOUNDATION

By: /s/ Andrew Farnum
Name: Andrew Farnum
Title: Director, Program-Related Investments

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

RAJESH HARICHANDRA BUDHRANI

By: /s/ Rajesh Harichandra Budhrani
Name: Rajesh Harichandra Budhrani

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

CANAAN VIII L.P.

By: Canaan Partners VIII LLC

By: /s/ Dr. Stephen Bloch
Name: Dr. Stephen Bloch
Title: Member/Manager

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

GARDEN EAST LIMITED

By: /s/ Lynn Chong
Name: Lynn Chong
Title: Authorized Signatory

By: /s/ Elwes Yap
Name: Elwes Yap
Title: Authorized Signatory

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

GLAXO GROUP LIMITED

By: /s/ Paul Williamson
Name: Paul Williamson
Title: Authorized Signatory

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

HEALTHIOS CAPITAL MARKETS, LLC

By: /s/ David B. Loucks
Name: David B. Loucks
Title: CEO and President

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

HFA INVESTMENTS, LLC

By: /s/ Jan Haas
Name: Jan Haas
Title: President

**SIGNATURE PAGE TO SEVENTH AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT
FOR LIQUIDIA TECHNOLOGIES, INC.**

INVESTOR:

LEERINK REVELATION HEALTHCARE FUND I, LLC

By: /s/ Zack Scott
Name: Zack Scott
Title: Managing Partner

INVESTOR:

ROB LIPPE

INVESTOR:

**JUDITH A. MALINOSKI REVOCABLE TRUST,
AS AMENDED, DATED APRIL 28, 2009**

By: /s/ Judith A. Malinoski
Name: Judith A. Malinoski
Title: Trustee

INVESTOR:

MARIO FAMILY CREDIT LLC SERIES D

By: Melmotte LLC, its general partner

By: /s/ Christopher B. Mario
Name: Christopher B. Mario
Title: Manager

INVESTOR:

MMIC INVESTMENT HOLDINGS

By: /s/ Jason T. Sandner
Name: Jason T. Sandner
Title: CFO

INVESTOR:

MORNINGSIDE VENTURE INVESTMENTS LIMITED

By: /s/ Louise Mary Garbario
Name: Louise Mary Garbario
Title: Authorized Signatory

By: /s/ Jill Marie Franklin
Name: Jill Marie Franklin
Title: Authorized Signatory

INVESTOR:

MARY NAPIER

/s/ Mary Napier
Mary Napier

INVESTOR:

TOMAS NAVRATIL

/s/ Tomas Navratil
Tomas Navratil

INVESTOR:

NEA VENTURES 2006, LIMITED PARTNERSHIP

By:
By:

By: /s/ Louis Citron
Name: Louis Citron
Title: Vice President

NEW ENTERPRISE ASSOCIATES 12, LIMITED PARTNERSHIP

By: NEA Partners 12, Limited Partnership, its general partner
By: NEA 12 GP, LLC, its general partner

By: /s/ Louis Citron
Name: Louis Citron
Title: Authorized Signatory

INVESTOR:

JENNIE HUME ORR

/s/ Jennie Hume Orr
Jennie Hume Orr

INVESTOR:

PHARMACEUTICAL PRODUCT DEVELOPMENT, LLC

By: /s/ B. Judd Hartman
Name: B. Judd Hartman
Title: Chief Administrative Officer and General Counsel

INVESTOR:

LUKAS ROUSH

/s/ Lukas Roush
Lukas Roush

INVESTOR:

SOVEREIGN'S CAPITAL II, LP

By: /s/ Lukas Roush
Name: Lukas Roush
Title: Manager

INVESTOR:

MICHELE STONE

/s/ Michele Stone
Michele Stone

INVESTOR:

TRINITY HALL, CAMBRIDGE

By: /s/ Paul Ffolkes Davis
Name: Paul Ffolkes Davis
Title: Bursar

INVESTOR:

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL FOUNDATION, INC.

By: /s/ Matthew M. Fajack
Name: Matthew M. Fajack
Title: Chief Financial Officer and Vice Chancellor for Finance and Administration

INVESTOR:

VELOCITY FINANCIAL GROUP, LLC

By: /s/ Jan Haas
Name: Jan Haas
Title: President

INVESTOR:

WAKEFIELD GROUP III, LLC

By: Wakefield Ventures, LLC

By: /s/ Anna Spangler Nelson
Name: Anna Spangler Nelson
Title: Manager

INVESTOR:

WAKEFIELD GROUP IV LLC

By: /s/ Anna Spangler Nelson
Name: Anna Spangler Nelson
Title: Manager

INVESTOR:

WB THIRD LLC

By: /s/ Henry N. Nassau
Name: Henry N. Nassau
Title: Manager

INVESTOR:

XERAYA LT LTD

By: /s/ Fares Zahir
Name: Fares Zahir
Title: Director

INVESTOR:

ONG ZHEN YUAN

By: /s/ Ong Zhen Yuan
Ong Zhen Yuan

INVESTOR:

1118 LIMITED

By: /s/ Ajay Ajit Kumar Karsandas Hamlai
Name: Ajay Ajit Kumar Karsandas Hamlai
Title: Authorized Signatory

By: /s/ Sujay Ajit Kumar Karsandas Hamlai
Name: Sujay Ajit Kumar Karsandas Hamlai
Title: Authorized Signatory

Schedule A

Investors

ALWP Capital SPC Ltd — ALWP Diversified Segregated Portfolio Fund
ALWP Capital SPC Ltd — ALWP Segregated Growth Segregated Portfolio Fund
Amereus Group Pte Ltd
A.M. Pappas Life Science Ventures IV, L.P.
Bill & Melinda Gates Foundation
Robert M. Brady
Canaan VIII L.P.
Alfred G. Childers
Don Denison
Garden East Limited
Glaxo Group Limited
Burton B. Goldstein, Jr.
Kathleen G. Goldstein
Green Family Trust U/T/A 11/6/95
Healthios Capital Markets, LLC
HFA Investments, LLC
Brent Jones
Greg Kopchinsky
Leerink Revelation Healthcare Fund I, LLC
Rob Lippe
Magellan's Compass 1 Limited Partnership
Judith A. Malinoski Revocable Trust, as amended, dated April 28, 2009
Mario Family Credit LLC Series D
MMIC Investment Holdings
Morningside Venture Investments Limited
Mary Napier
Tomas Navratil

New Enterprise Associates 12, Limited Partnership
NEA Ventures 2006, Limited Partnership
Jennie Hume Orr
Pharmaceutical Product Development, LLC
PV IV CEO Fund, L.P.
Luke Roush
Sovereign's Capital II, LP
Richard Stack and Nancy Stack, JT TEN
Starling Family Trust
Michele Stone
Trinity Hall, Cambridge
The University of North Carolina at Chapel Hill Foundation, Inc.
Velocity Financial Group, LLC
Wakefield Group III, LLC
Wakefield Group IV LLC
WB Third LLC
Michael S. Williams Revocable Trust
Xeraya LT Ltd
Ong Zhen Yuan
1118 Limited

Schedule B

Common Holders

Joseph M. DeSimone and Suzanne DeSimone, JT TEN
DeSimone Legacy Trust
Shumate Samulski Living Trust dated September 29, 2005

LIQUIDIA TECHNOLOGIES, INC.

2016 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: May 18, 2016

APPROVED BY THE STOCKHOLDERS: August 10, 2016

TERMINATION DATE: May 17, 2026

1. GENERAL.

(a) **Successor to and Continuation of Prior Plan.** The Plan is intended as the successor to and continuation of the Liquidia Technologies, Inc. Stock Option Plan, as amended (the “*Prior Plan*”). Following the Effective Date, no additional option awards will be granted under the Prior Plan. All Awards granted on or after the Effective Date will be granted under this Plan. All option awards granted under the Prior Plan will remain subject to the terms of the Prior Plan. Any shares that would otherwise remain available for future grants under the Prior Plan as of the Effective Date will cease to be available under the Prior Plan at such time.

(b) **Eligible Stock Award Recipients.** Employees, Directors and Consultants are eligible to receive Stock Awards.

(c) **Available Stock Awards.** The Plan provides for the grant of the following types of Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights, (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards and (vi) Other Stock Awards.

(d) **Purpose.** The Plan, through the grant of Stock Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

2. ADMINISTRATION.

(a) **Administration by the Board.** The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) **Powers of the Board.** The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine (A) who will be granted Stock Awards; (B) when and how each Stock Award will be granted; (C) what type of Stock Award will be granted; (D) the provisions of each Stock Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Stock Award; (E) the number of shares of Common Stock subject to, or the cash value of, a Stock Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Stock Awards. The

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Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Stock Award fully effective.

(iii) To settle all controversies regarding the Plan and Stock Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which a Stock Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or a Stock Award Agreement, suspension or termination of the Plan will not impair a Participant's rights under the Participant's then-outstanding Stock Award without the Participant's written consent except as provided in subsection (viii) below.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Stock Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Stock Awards available for issuance under the Plan. Except as otherwise provided in the Plan or a Stock Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Stock Award without the Participant's written consent.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 422 of the Code regarding Incentive Stock Options.

(viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that a Participant's rights under any Stock Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock Awards without the affected Participant's consent (A) to maintain the qualified status of the Stock Award as an

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Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Stock Award solely because it impairs the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Stock Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Stock Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Stock Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).

(xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution thereof of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of

Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

(c) **Delegation to Committee.** The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(d) **Delegation to an Officer.** The Board may delegate to one or more Officers the authority to do one or both of the following: (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Stock Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(t) below.

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(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve.

(i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date will not exceed 1,612,504 shares (the "**Share Reserve**").

(ii) For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a).

(b) **Reversion of Shares to the Share Reserve.** If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.

(c) **Incentive Stock Option Limit.** Subject to the Share Reserve and Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be a number of shares of Common Stock equal to three multiplied by the Share Reserve.

(d) **Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. ELIGIBILITY.

(a) **Eligibility for Specific Stock Awards.** Incentive Stock Options may be granted only to employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405, unless (i) the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has

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determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.

(b) **Ten Percent Stockholders.** A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

(c) **Consultants.** A Consultant will not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or sale of the Company's securities to such Consultant is not exempt under Rule 701 because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of any other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions.

5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Stock Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Stock Award Agreement or otherwise) the substance of each of the following provisions:

(a) **Term.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of 10 years from the date of its grant or such shorter period specified in the Stock Award Agreement.

(b) **Exercise Price.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Stock Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Stock Award if such Stock Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) **Purchase Price for Options.** The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft or money order payable to the Company;

(ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;

(iv) if an Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(v) according to a deferred payment or similar arrangement with the Optionholder; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(vi) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Stock Award Agreement.

(d) **Exercise and Payment of a SAR.** To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Stock Award Agreement evidencing such SAR.

(e) **Transferability of Options and SARs.** The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) **Restrictions on Transfer.** An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer

of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.

(ii) **Domestic Relations Orders.** Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) **Beneficiary Designation.** Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, upon the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) **Vesting Generally.** The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) **Termination of Continuous Service.** Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Stock Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Stock Award Agreement, which period will not be less than 30 days if necessary to comply with applicable laws unless such termination is for Cause) and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

(h) **Extension of Termination Date.** If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement. In addition, unless otherwise provided in a Participant's

Stock Award Agreement, if the sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of the period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement.

(i) **Disability of Participant.** Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(j) **Death of Participant.** Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Award Agreement for exercisability after the termination of the Participant's Continuous Service (for a reason other than death), then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of such

Option or SAR as set forth in the Stock Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the date of such termination of Continuous Service.

(l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Stock Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued,

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or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Stock Award Agreement, in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

(m) Early Exercise of Options. An Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 8(l), any unvested shares of Common Stock so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate. Provided that the "Repurchase Limitation" in Section 8(l) is not violated, the Company will not be required to exercise its repurchase right until at least six months (or such longer or shorter period of time required to avoid classification of the Option as a liability for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option Agreement.

(n) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 8(l), the Option or SAR may include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Participant pursuant to the exercise of the Option or SAR.

(o) Right of First Refusal. The Option or SAR may include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the Participant of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option or SAR. Such right of first refusal will be subject to the "Repurchase Limitation" in Section 8(l). Except as expressly provided in this Section 5(o) or in the Stock Award Agreement, such right of first refusal will otherwise comply with any applicable provisions of the bylaws of the Company.

6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARs.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock underlying a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

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(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 8(l), shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right, any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the will Board deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the

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delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) **Dividend Equivalents.** Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) **Termination of Participant's Continuous Service.** Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) **Compliance with Section 409A of the Code.** Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code shall contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, shall be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

(c) **Other Stock Awards.** Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. COVENANTS OF THE COMPANY.

(a) **Availability of Shares.** The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Stock Awards.

(b) **Securities Law Compliance.** The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however*, that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for

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failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of a Stock Award or the subsequent issuance of cash or Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) **No Obligation to Notify or Minimize Taxes.** The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. MISCELLANEOUS.

(a) **Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Stock Awards will constitute general funds of the Company.

(b) **Corporate Action Constituting Grant of Stock Awards.** Corporate action constituting a grant by the Company of a Stock Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement or related grant documents as a result of a clerical error in the papering of the Stock Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Stock Award Agreement or related grant documents.

(c) **Stockholder Rights.** No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to a Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Stock Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to the Stock Award has been entered into the books and records of the Company.

(d) **No Employment or Other Service Rights.** Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) **Change in Time Commitment.** In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Stock Award to the Participant, the Board has the right in its sole

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discretion to (x) make a corresponding reduction in the number of shares subject to any portion of such Stock Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Stock Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Stock Award that is so reduced or extended.

(f) **Incentive Stock Option Limitations.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(g) **Investment Assurances.** The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that the Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(h) **Withholding Obligations.** Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to a Stock Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for

financial accounting purposes); (iii) withholding cash from a Stock Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Stock Award Agreement.

(i) **Electronic Delivery.** Any reference herein to a “written” agreement or document will include any agreement or document delivered electronically or posted on the Company’s intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

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(j) **Deferrals.** To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant’s termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) **Compliance with Section 409A of the Code.** To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award shall incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements shall be interpreted in accordance with Section 409A of the Code. Notwithstanding anything to the contrary in the Plan (and unless the Stock Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding a Stock Award that constitutes “deferred compensation” under Section 409A of the Code is a “specified employee” for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant’s “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant’s death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(l) **Repurchase Limitation.** The terms of any repurchase right will be specified in the Stock Award Agreement. The repurchase price for vested shares of Common Stock will be the Fair Market Value of the shares of Common Stock on the date of repurchase. The repurchase price for unvested shares of Common Stock will be the lower of (i) the Fair Market Value of the shares of Common Stock on the date of repurchase or (ii) their original purchase price. However, the Company will not exercise its repurchase right until at least six months (or such longer or shorter period of time necessary to avoid classification of the Stock Award as a liability for financial accounting purposes) have elapsed following delivery of shares of Common Stock subject to the Stock Award, unless otherwise specifically provided by the Board.

9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) **Capitalization Adjustments.** In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), and (iii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

(b) **Dissolution or Liquidation.** Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards

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(other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company’s right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company’s repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) **Corporate Transaction.** The following provisions will apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board may take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

(i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation’s parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

(ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation’s parent company);

(iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction; *provided, however*, that the Board may require Participants to complete and deliver to the Company a notice of exercise before the effective date of a Corporate Transaction, which exercise is contingent upon the effectiveness of such Corporate Transaction;

(iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

(v) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration as the Board, in its sole discretion, may consider appropriate;

(vi) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, without the payment of consideration; and

(vii) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of

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the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise. For clarity, this payment may be zero (\$0) if the value of the property is equal to or less than the exercise price. Payments under this provision may be delayed to the same extent that payment of consideration to the holders of the Company’s Common Stock in connection with the Corporate Transaction is delayed as a result of escrows, earn outs, holdbacks or any other contingencies.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(d) **Change in Control.** A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

10. PLAN TERM; EARLIER TERMINATION OR SUSPENSION OF THE PLAN.

(a) **Plan Term.** The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan will automatically terminate on the day before the 10th anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) **No Impairment of Rights.** Suspension or termination of the Plan will not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant or as otherwise permitted in the Plan.

11. EFFECTIVE DATE OF PLAN.

This Plan will become effective on the Effective Date.

12. CHOICE OF LAW.

The laws of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. DEFINITIONS. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) **"Affiliate"** means, at the time of determination, any "parent" or "majority-owned subsidiary" of the Company, as such terms are defined in Rule 405. The Board will have the authority to determine the time or times at which "parent" or "majority-owned subsidiary" status is determined within the foregoing definition.

(b) **"Board"** means the Board of Directors of the Company.

(c) **"Capitalization Adjustment"** means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization,

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recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(d) **"Cause"** will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (iii) such Participant's intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iv) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (v) such Participant's gross misconduct. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause will be made by the Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(e) **"Change in Control"** means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (C) solely because the level of Ownership held by any Exchange Act Person (the "**Subject Person**") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same

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proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; or

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition.

Notwithstanding the foregoing definition or any other provision of this Plan, (A) the term Change in Control will not include (i) a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company or (ii) to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Stock Awards subject to such agreement; *provided, however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition will apply.

(f) **"Code"** means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) **"Committee"** means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) **"Common Stock"** means the Class A Voting Common Stock of the Company.

(i) **"Company"** means Liquidia Technologies, Inc., a Delaware corporation.

(j) **"Consultant"** means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan.

(k) “**Continuous Service**” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service will be considered interrupted in the

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case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(l) “**Corporate Transaction**” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

- (i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;
- (ii) a sale or other disposition of at least 50% of the outstanding securities of the Company;
- (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- (iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(m) “**Director**” means a member of the Board.

(n) “**Disability**” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than twelve (12) months as provided in Sections 22(e) (3) and 409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(o) “**Effective Date**” means the effective date of this Plan, which is the earlier of (i) the date that this Plan is first approved by the Company’s stockholders, and (ii) the date this Plan is adopted by the Board.

(p) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(q) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(r) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(s) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the

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Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities.

(t) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined by the Board in compliance with Section 409A of the Code or, in the case of an Incentive Stock Option, in compliance with Section 422 of the Code.

(u) “**Incentive Stock Option**” means an option granted pursuant to Section 5 of the Plan that is intended to be, and that qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(v) “**Nonstatutory Stock Option**” means an option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(w) “**Officer**” means any person designated by the Company as an officer.

(x) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(y) “**Option Agreement**” means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.

(z) “**Optionholder**” means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(aa) “**Other Stock Award**” means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(c).

(bb) “**Other Stock Award Agreement**” means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.

(cc) “**Own**,” “**Owned**,” “**Owner**,” “**Ownership**” A person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(dd) “**Participant**” means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(ee) “**Plan**” means this 2016 Equity Incentive Plan.

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(ff) “**Restricted Stock Award**” means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(gg) “**Restricted Stock Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(hh) “**Restricted Stock Unit Award**” means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(ii) “**Restricted Stock Unit Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.

(jj) “**Rule 405**” means Rule 405 promulgated under the Securities Act.

(kk) “**Rule 701**” means Rule 701 promulgated under the Securities Act.

(ll) “**Securities Act**” means the Securities Act of 1933, as amended.

(mm) “**Stock Appreciation Right**” or “**SAR**” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.

(nn) “**Stock Appreciation Right Agreement**” means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

(oo) “**Stock Award**” means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right or any Other Stock Award.

(pp) “**Stock Award Agreement**” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

(qq) “**Subsidiary**” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

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(rr) “**Ten Percent Stockholder**” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

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**LIQUIDIA TECHNOLOGIES, INC.
AMENDMENT NO.1 TO 2016 EQUITY INCENTIVE PLAN**

December 8, 2016

WHEREAS, Liquidia Technologies, Inc. (the “**Company**”) is the sponsor of the Liquidia Technologies, Inc. 2016 Equity Incentive Plan (the “**Plan**”); and

WHEREAS, the Company desires to amend the Plan to provide for a more flexible “net exercise” arrangement as a method to exercise stock options;

NOW, THEREFORE, effective as of December 7, 2016, the Plan is hereby amended as follows:

1. Section 5(c)(iv) of the Plan is hereby deleted in its entirety and replaced with the following:

“subject to such limits and approvals as the Board may impose from time to time, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; *provided, however*, that the Company will accept a cash or other payment from the Participant to the extent there remains any balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the “net exercise,” (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations.”

2. Except as set forth in this Amendment, the Plan shall be unaffected hereby and shall remain in full force and effect.

[Signature Page Immediately Follows]

IN WITNESS WHEREOF, the undersigned has caused this Amendment to be executed as of the date first set forth above.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Timothy Albury
Name: Timothy Albury
Title: Chief Financial Officer

[SIGNATURE PAGE TO 2016 EQUITY INCENTIVE PLAN AMENDMENT NO. 1]

**LIQUIDIA TECHNOLOGIES, INC.
AMENDMENT NO.2 TO 2016 EQUITY INCENTIVE PLAN**

February 2, 2018

WHEREAS, Liquidia Technologies, Inc. (the “**Company**”) is the sponsor of the Liquidia Technologies, Inc. 2016 Equity Incentive Plan (as amended, the “**Plan**”); and

WHEREAS, the Company desires to amend the Plan to increase the number of shares of Common Stock available for issuance under the Plan; and

WHEREAS, Section 2(b)(vi) of the Plan permits the Board to amend the Plan in whole or in part at any time; provided, however, that any Plan amendment that materially increases the number of shares of Common Stock available for issuance under the Plan is made subject to shareholder approval of such amendment;

NOW, THEREFORE, effective as of February 2, 2018, the Plan is hereby amended as follows:

1. Section 3(a)(i) of the Plan is deleted and replaced with the following:

Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards shall not exceed 22,811,308 shares (the "Share Reserve").

2. Except as set forth in this Amendment, the Plan shall be unaffected hereby and shall remain in full force and effect.

[Signature Page Immediately Follows]

IN WITNESS WHEREOF, the undersigned has caused this Amendment to be executed as of the date first set forth above.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Neal F. Fowler
Name: Neal F. Fowler
Title: Chief Executive Officer

[SIGNATURE PAGE TO 2016 EQUITY INCENTIVE PLAN AMENDMENT NO. 2]

LIQUIDIA TECHNOLOGIES, INC.
RESTRICTED STOCK UNIT GRANT NOTICE
(2016 EQUITY INCENTIVE PLAN)

Liquidia Technologies, Inc. (the "Company") hereby awards to Participant a Restricted Stock Unit Award for the number of shares of the Company's Common Stock set forth below (the "Award"). The Award is subject to all of the terms and conditions as set forth herein and in the Company's 2016 Equity Incentive Plan, as amended (the "Plan"), and the Restricted Stock Unit Agreement (the "Award Agreement"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Award Agreement will have the meanings set forth in the Plan or the Award Agreement. Except as explicitly provided herein or in the Award Agreement, in the event of any conflict between the terms in the Award and the Plan, the terms of the Plan will control.

Participant: _____
Date of Grant: _____
Number of restricted stock units ("RSUs"): _____
Consideration: Participant's Services

Vesting Schedule: Participant will receive a benefit with respect to the RSUs only if the RSUs vest. The time and service-based requirement (the "Service-Based Requirement") must be satisfied in order for a RSU to vest.

Service-Based Requirement: The Service-Based Requirement will be satisfied in installments as to the RSUs as follows: []% of the total number of RSUs awarded will satisfy the Service-Based Requirement on the first anniversary of the Date of Grant and the remaining []% of RSUs awarded will satisfy the Service-Based Requirement in equal monthly installments of []% through the [] anniversary of the Date of Grant, subject to the Participant's Continuous Service on each such date, such that if the Participant's Continuous Service remains uninterrupted through the fourth anniversary of the Date of Grant, all of the RSUs awarded under this Award will have satisfied the Service-Based Requirement. For purposes of calculating the number of shares which have satisfied the Service-Based Requirement for any particular period, such number shall be equal to the total number of RSUs granted under this Award which have satisfied the Service-Based Requirement as of the end of such particular period less the number of RSU's granted under this Award which had previously satisfied the Service-Based Requirements as of the start of such particular period (rounding down to the nearest whole RSU).

Settlement: If an RSU vests as provided for above, then the Company will deliver one share of Common Stock (or its cash equivalent, at the discretion of the Company) for each Vested RSU. The shares will be issued in accordance with the issuance schedule set forth in Section 6 of the Award Agreement.

Additional Terms/Acknowledgements: The undersigned Participant acknowledges receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan. Participant further acknowledges that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the Award and supersedes all prior oral and written agreements, promises and/or representations on that subject, with the exception of (i) restricted stock units or other stock awards previously granted and delivered to Participant, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment or severance arrangement that would provide for vesting acceleration of this Award upon the terms and conditions set forth therein.

Notices may be delivered to the Participant by electronic transmission by email and in such instance, such notices shall be sent to the electronic mail address set forth below the Participant's signature or to such other electronic mail address as shall be designated by the Participant in a written notice sent to the Company.

This consent applies to any and all notices required to be given to the Participant for any purposes relating to this Award, Participant's RSU or any Common Stock issuable upon vesting of the RSU.

[signature page follows]

By accepting this Award, the undersigned Participant acknowledges having received and read this Restricted Stock Unit Grant Notice, the Award Agreement and the Plan and agrees to all of the terms and conditions set forth in these documents. Participant consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

LIQUIDIA TECHNOLOGIES, INC.

PARTICIPANT:

By: _____
Signature

Signature

Title: _____

Date: _____

Date: _____

Designated Email Address: _____

**LIQUIDIA TECHNOLOGIES, INC.
2016 EQUITY INCENTIVE PLAN**

RESTRICTED STOCK UNIT AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the “*Grant Notice*”) and this Restricted Stock Unit Agreement (the “*Agreement*”) and in consideration of your services, Liquidia Technologies, Inc. (the “*Company*”) has awarded you a Restricted Stock Unit Award (the “*Award*”) under its 2016 Equity Incentive Plan (the “*Plan*”) for the number of restricted stock units set forth on the Grant Notice. Capitalized terms not explicitly defined in this Agreement will have the same meanings given to them in the Plan or the Grant Notice, as applicable. Except as otherwise explicitly provided herein, in the event of any conflict between the terms in this Agreement and the Plan, the terms of the Plan will control.

The details of your Award, in addition to those set forth in the Grant Notice and the Plan, are as follows.

1. GRANT OF THE AWARD. This Award represents your right to be issued on a future date (as described below) the number of shares of Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice (the “*RSUs*”). As of the Date of Grant, the Company will credit to a bookkeeping account maintained by the Company for your benefit (the “*Account*”) the number of RSUs subject to the Award. This Award was granted in consideration of your services to the Company. Except as otherwise provided herein, you will not be required to make any payment to the Company (other than past and future services to the Company) with respect to your receipt of the Award, the vesting of the RSUs or the delivery of the Common Stock to be issued in respect of the Award. Notwithstanding the foregoing, the Company reserves the right to issue you the cash equivalent of Common Stock, in part or in full satisfaction of the delivery of Common Stock upon vesting of your RSUs, and, to the extent applicable, references in this Agreement and the Grant Notice to Common Stock issuable in connection with your RSUs will include the potential issuance of its cash equivalent pursuant to such right.

2. VESTING. Subject to the limitations contained herein, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice.

3. NUMBER OF RSUS AND SHARES OF COMMON STOCK.

(a) The number of RSUs subject to your Award may be adjusted from time to time for Capitalization Adjustments, as provided in the Plan.

(b) Any additional RSUs, shares, cash or other property that become subject to the Award pursuant to this Section 3, if any, will be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other RSUs covered by your Award.

(c) Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock will be created pursuant to this Section 3. The Board will, in its discretion, determine an equivalent benefit for any fractional shares or fractional shares that might be created by the adjustments referred to in this Section 3.

4. SECURITIES LAW COMPLIANCE. You may not be issued any shares of Common Stock in respect of your Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Your Award also must comply with other applicable laws and regulations governing the Award, and you will not receive such shares if the Company determines that such receipt would not be in material compliance with such laws and regulations. To the extent the Company is unable to issue shares of Common Stock pursuant to this Section 4, the Company may issue you the cash equivalent of such Common Stock as provided in Section 6(a).

5. TRANSFER RESTRICTIONS. Your Award is not transferable, except by will or by the laws of descent and distribution. In addition to any other limitation on transfer created by applicable securities laws, you agree not to assign, hypothecate, donate, encumber or otherwise dispose of any interest in any of the shares of Common Stock subject to the Award until the shares are issued to you in accordance with Section 6 of this Agreement. After the shares have been issued to you, you cannot assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares except in compliance with the Company’s Bylaws or any other agreement required to be entered into by you and provided that any such actions are in compliance with the provisions herein, any applicable Company policies (including, but not limited to, insider trading and window period policies) and applicable securities laws. Notwithstanding the foregoing, by delivering written notice to the Company, in a form satisfactory to the Company, you may designate a third party who, in the event of your death, will thereafter be entitled to receive any distribution of Common Stock to which you were entitled at the time of your death pursuant to this Agreement.

6. DATE OF ISSUANCE.

(a) Subject to the satisfaction of the Withholding Taxes set forth in Section 10 of this Agreement, the Company will deliver to you a number of shares of Common Stock equal to the number of vested RSUs subject to your Award, including any additional RSUs received pursuant to Section 3 above that relate to those vested RSUs, on the applicable vesting date. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date will instead fall on the next following business day. Notwithstanding the foregoing, to the extent applicable at a vesting date when shares are registered under the Securities Act, in the event that (i) any shares covered by your Award are scheduled to be delivered on a day (the “*Original Distribution Date*”) that does not occur: (A) during an open “window period” applicable to you under the Company’s policy permitting officers, directors and other designated individuals to sell shares only during certain “window” periods, in effect from time to time (the “*Policy*”), (B) on a day on which you are permitted to sell shares of Common Stock pursuant to a written plan that meets the requirements of Rule 10b5-1 under the Exchange Act, as determined by the Company in accordance with the Policy, or (C) on a date when you are otherwise permitted to sell shares of Common Stock on the open market, and (ii) the Company elects not to satisfy its obligations for

Tax-Related Items (as defined in Section 10) by withholding shares from your distribution or withholding from other compensation otherwise payable to you by the Company, then such shares will not be delivered on such Original Distribution Date and will instead be delivered on the first business day of the next occurring open “window period” applicable to you pursuant to such Policy (regardless of whether you are still providing Continuous Service at such time) or the next business day when you are not prohibited from selling shares of Common Stock in the open market, but in no event later than the later of (i) the fifteenth (15th) day of the third month following the end of the calendar year in which the applicable shares covered by the Award vest or (ii) the fifteenth (15th) day of the third month following the end of the Company’s taxable year in which the applicable shares covered by the Award vest (the “*Issuance Deadline*”). Delivery of the shares pursuant to the provisions of this Section 6(a) is intended to comply with the requirements for the short-term deferral exemption available under Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such manner. The form of such delivery of the shares (e.g., a stock certificate or electronic entry evidencing such shares) will be determined by the Company.

(b) If the Company elects to issue you cash in part or in full satisfaction of the shares of Common Stock issuable upon vesting of your RSUs, then the foregoing provisions of this Section 6(a) will not apply and such cash will be paid to you in a lump sum at any time on or after the vesting date of your RSUs, but in no event later than the Issuance Deadline.

7. DIVIDENDS. You will receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment as provided in the Plan; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.

8. RESTRICTIVE LEGENDS. The shares issued in respect of your Award will be endorsed with appropriate legends determined by the Company.

9. AWARD NOT AN EMPLOYMENT OR SERVICE CONTRACT.

(a) Your Continuous Service with the Company or an Affiliate is not for any specified term and may be terminated by you or by the Company or an Affiliate at any time, for any reason, with or without cause and with or without notice. Nothing in this Agreement (including, but not limited to, the vesting of your Award pursuant to the schedule set forth in the Grant

Notice herein or the issuance of the shares in respect of your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Agreement or the Plan will: (i) confer upon you any right to continue in the employ of, or affiliation with, the Company or an Affiliate; (ii) constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Agreement or Plan; or (iv) deprive the Company or an Affiliate of the right to terminate you at will and without regard to any future vesting opportunity that you may have.

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(b) By accepting this Award, you acknowledge and agree that the right to continue vesting in the Award pursuant to the vesting schedule set forth in Section 2 and in the Grant Notice is earned only by continuing as an employee, director or consultant at the will of the Company or an Affiliate (not through the act of being hired, being granted this Award or any other award or benefit) and that the Company has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Affiliates at any time or from time to time, as it deems appropriate (a "reorganization"). You further acknowledge and agree that such a reorganization could result in the termination of your Continuous Service, or the termination of Affiliate status of your employer and the loss of benefits available to you under this Agreement, including but not limited to, the termination of the right to continue vesting in the Award. You further acknowledge and agree that this Agreement, the Plan, the transactions contemplated hereunder and the vesting schedule set forth in the Grant Notice or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant with the Company or an Affiliate for the term of this Agreement, for any period, or at all, and will not interfere in any way with your right or the right of the Company or an Affiliate to terminate your Continuous Service at any time, with or without cause and with or without notice.

(c) Your Award is made at the discretion of the Company and the Plan may be suspended or terminated by the Company at any time. The grant of an Award in one year or at one time does not in any way entitle you to an Award in the future. The Plan is wholly discretionary and is not to be considered part of your normal or expected compensation subject to severance, resignation, redundancy or similar compensation. The value of your Award is an extraordinary item of compensation which is outside the scope of your service contract (if any).

10. RESPONSIBILITY FOR TAXES.

(a) On or before the time you receive a distribution of the shares of Common Stock underlying the RSUs or a cash payment, or at any time thereafter as requested by the Company, you hereby authorize any required withholding from the Common Stock issuable to you or the cash payment and/or otherwise agrees to make adequate provision in cash for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or any Affiliate that arise in connection with the Award (the "Withholding Taxes"). Subject to Section 10(d) of this Agreement, if applicable, and notwithstanding any other provision of this Section, the Company may, in its sole discretion, satisfy all or any portion of the Withholding Taxes obligation relating to the Award by any of the following means or by a combination of such means: (i) withholding from any compensation otherwise payable to you by the Company; (ii) causing you to tender a cash payment; (iii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with the RSUs with a Fair Market Value (measured as of the date shares of Common Stock are issued pursuant to Section 6) equal to the amount of such Withholding Taxes; *provided, however*, that the number of such shares of Common Stock so withheld shall not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income (or such greater amount permitted under FASB Accounting Standards Codification Topic 718, Compensation—Stock Compensation, for equity-classified awards); or (iv) withholding cash from the Award settled in cash.

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(b) Unless the tax withholding obligations of the Company and/or any Affiliate are satisfied, the Company shall have no obligation to deliver to you any Common Stock or make a cash payment.

(c) In the event the Company's obligation to withhold arises prior to the delivery to you of Common Stock or the cash payment or it is determined after the delivery of Common Stock or the cash payment to you that the amount of the Company's withholding obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

(d) If specified in the Grant Notice, you may direct the Company to withhold shares of Common Stock with a Fair Market Value (measured as of the date shares of Common Stock are issued pursuant to Section 6) equal to the amount of such Withholding Taxes; *provided, however*, that the number of such shares of Common Stock so withheld shall not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income.

11. **TRANSFER RESTRICTIONS.** In addition to any other limitation on transfer created by applicable laws and the restrictions in Section 10, as applicable, you will not sell, assign, hypothecate, donate, encumber or otherwise dispose of all or any part of the shares subject to your Award or any interest in such shares except in compliance with this Agreement (including without limitation Sections 8 and 13), the Company's bylaws and applicable securities laws.

12. **DATA TRANSFER.** You explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this document by and among, as applicable, your employer, and the Company and its Affiliates for the exclusive purpose of implementing, administering and managing your participation in the Plan. You understand that the Company, its Affiliates and your employer hold certain personal information about you, including, but not limited to, name, home address and telephone number, date of birth, social security number (or other identification number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all options or any other entitlement to shares of stock awarded, canceled, purchased, exercised, vested, unvested or outstanding in your favor for the purpose of implementing, managing and administering the Plan ("**Data**"). You understand that the Data may be transferred to any third parties assisting in the implementation, administration and management of the Plan, that these recipients may be located in your country or elsewhere and that the recipient country may have different data privacy laws and protections than your country. You may request a list with the names and addresses of any potential recipients of the Data by contacting the Stock Plan Administrator at the Company (the "**Stock Plan Administrator**"). You authorize the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing your participation in the Plan, including any requisite transfer of such Data, as may be required to a broker or other third party with whom you may elect to deposit any shares of Common Stock acquired upon the vesting of the Award. You understand that Data will be held only as long as is necessary to implement, administer and manage participation in the Plan. You may, at any time, view Data, request additional information about the storage and processing of the Data, require any necessary amendments

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to the Data or refuse or withdraw the consents herein, in any case without cost, by contacting the Stock Plan Administrator in writing. You understand that refusing or withdrawing consent may affect your ability to participate in the Plan. For more information on the consequences of refusing to consent or withdrawing consent, you may contact the Stock Plan Administrator.

13. **UNSECURED OBLIGATION.** Your Award is unfunded, and as a holder of a vested Award, you will be considered an unsecured creditor of the Company with respect to the Company's obligation, if any, to issue shares pursuant to this Agreement. You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this Agreement until such shares are issued to you pursuant to Section 6 of this Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

14. **NOTICES.** Any notices provided for in your Award or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. Notwithstanding the foregoing, the Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this Award by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this Award you consent to receive such documents by electronic delivery and, if requested, to agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

15. **LANGUAGE.** If you have received this Agreement, or any other document related to this Award and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

16. **INSIDER TRADING RESTRICTIONS/MARKET ABUSE LAWS.** You acknowledge that, depending on your country, you may be subject to insider trading restrictions and/or market abuse laws, which may affect your ability to acquire or sell the shares of Common Stock or rights to the shares of Common Stock under the Plan during such times as you are considered to have “inside information” regarding the Company (as defined by the laws in your country or any country in which the Company’s shares of Common Stock are registered or listed). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You acknowledge that it is your responsibility to comply with any applicable restrictions, and you are advised to speak to your personal advisor on this matter.

17. **IMPOSITION OF OTHER REQUIREMENTS.** The Company reserves the right to impose other requirements on your participation in the Plan, on any shares of Common Stock

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acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

18. **MISCELLANEOUS.**

(a) The rights and obligations of the Company under your Award may be transferred to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company’s successors and assigns. Your rights and obligations under your Award may only be assigned with the prior written consent of the Company.

(b) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award.

(c) You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award, and fully understand all provisions of your Award.

(d) This Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

19. **GOVERNING PLAN DOCUMENT.** Your Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Except as expressly provided in this Agreement, in the event of any conflict between the provisions of your Award and those of the Plan, the provisions of the Plan will control. In addition, to the extent applicable, your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd—Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.

20. **SEVERABILITY.** If all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

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21. **EFFECT ON OTHER EMPLOYEE BENEFIT PLANS.** The value of the Award subject to this Agreement will not be included as compensation, earnings, salaries, or other similar terms used when calculating the Employee’s benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company’s or any Affiliate’s employee benefit plans.

22. **AMENDMENT.** This Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Company. Notwithstanding the foregoing, this Agreement may be amended solely by the Board by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to you, and provided that no such amendment adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Board reserves the right to change, by written notice to you, the provisions of this Agreement in any way it may deem necessary or advisable to carry out the purpose of the grant as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change will be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.

23. **NO OBLIGATION TO MINIMIZE TAXES.** The Company has no duty or obligation to minimize the tax consequences to you of this Award and will not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax, financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so.

24. **COMPLIANCE WITH SECTION 409A OF THE CODE.** This Award is intended to comply with the “short-term deferral” rule set forth in Treasury Regulation Section 1.409A-1(b)(4). Notwithstanding the foregoing, if it is determined that the Award fails to satisfy the requirements of the short-term deferral rule and is otherwise deferred compensation subject to Section 409A of the Code and any state law of similar effect (collectively, “**Section 409A**”), and if you are a “Specified Employee” (within the meaning set forth Section 409A(a)(2)(B) (i) of the Code) as of the date of your separation from service (within the meaning of Treasury Regulation Section 1.409A-1(h)), then the issuance of any shares that would otherwise be made upon the date of the separation from service or within the first six months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the date that is six months and one day after the date of the separation from service, with the balance of the shares issued thereafter in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the shares is necessary to avoid the imposition of taxation on you in respect of the shares under Section 409A of the Code. Each installment of shares that vests is intended to constitute a “separate payment” for purposes of Treasury Regulation Section 1.409A-2(b)(2).

* * *

This Agreement will be deemed to be signed by you upon the signing by you of the Grant Notice to which it is attached.

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LIQUIDIA TECHNOLOGIES, INC.

STOCK OPTION GRANT NOTICE
(2016 EQUITY INCENTIVE PLAN)

LIQUIDIA TECHNOLOGIES, INC. (the “**Company**”), pursuant to its 2016 Equity Incentive Plan, as amended (the “**Plan**”), hereby grants to Optionholder an option to purchase the number of shares of the Company’s Common Stock set forth below. This option is subject to all of the terms and conditions as set forth in this notice, in the Option Agreement, the Plan and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Option Agreement will have the same definitions as in the Plan or the Option Agreement. If there is any conflict between the terms in this notice and the Plan, the terms of the Plan will control.

Optionholder:
Date of Grant:
Vesting Commencement Date:
Number of Shares Subject to Option:

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds \$100,000, your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. **METHOD OF PAYMENT.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner *permitted by your Grant Notice*, which may include one or more of the following:

(a) Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

(b) Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.

(c) Subject to such limits as the Board may impose from time to time, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations.

6. **WHOLE SHARES.** You may exercise your option only for whole shares of Common Stock.

7. **SECURITIES LAW COMPLIANCE.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such

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laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. **TERM.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however*, that if during any part of such three month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three months after the termination of your Continuous Service; *provided further*, that if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven months after the Date of Grant, and (B) the date that is three months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) 12 months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d) below);

(d) 18 months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the 10th anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three months after the date your employment with the Company or an Affiliate terminates.

9. **EXERCISE.**

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.

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(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two years after the Date of Grant or within one year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation (the "**Lock-Up Period**"); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. TRANSFERABILITY. Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) **Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

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(c) **Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. RIGHT OF FIRST REFUSAL. Shares of Common Stock that you acquire upon exercise of your option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however*, that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below will apply. The Company's right of first refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "**Listing Date**").

(a) Prior to the Listing Date, you may not validly Transfer (as defined below) any shares of Common Stock acquired upon exercise of your option, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any shares of Common Stock or any interest therein, the record holder of the shares of Common Stock to be transferred (the "**Offered Shares**") will give written notice (by registered or certified mail) to the Company. Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "**Notice Date**" and the record holder of the Offered Shares will be hereinafter referred to as the "**Offeror**." If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding Common Stock which is subject to the provisions of your option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares of Common Stock acquired upon exercise of your option will be immediately subject to the Company's Right of First Refusal (as defined below) with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

(ii) For a period of 30 calendar days after the Notice Date, or such longer period as may be required to avoid the classification of your option as a liability for financial accounting purposes, the Company will have the option to purchase all (but not less than all) of the Offered Shares at the purchase price and on the terms set forth in Section 11(a)(iii) (the Company's "**Right of First Refusal**"). In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30 days (including any extension required to avoid classification of the option as a liability for financial accounting purposes).

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the notice required under Section 11(a)(i)), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration

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other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the option given pursuant to Section 11(a)(ii) is not exercised, the Transfer proposed in the notice given pursuant to Section 11(a)(i) may take place; *provided, however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the 10th calendar day after the expiration of the 30 day option exercise period or after the ninetieth 90th calendar day after the expiration of the 30 day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section 11(a). The option exercise periods in this Section 11(a)(iv) will be adjusted to include any extension required to avoid the classification of your option as a liability for financial accounting purposes.

(b) As used in this Section 11, the term "**Transfer**" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family (as defined below). In such case, the transferee or other recipient will receive and hold the shares of Common Stock so transferred subject to the provisions of this Section, and there will be no further transfer of such shares except in accordance with the terms of this Section 11. As used herein, the term "**Immediate Family**" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

(c) None of the shares of Common Stock purchased on exercise of your option will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section 11 have been complied with in all respects. The certificates of stock evidencing shares of Common Stock purchased on exercise of your option will bear an appropriate legend referring to the transfer restrictions imposed by this Section 11.

(d) To ensure that the shares subject to the Company's Right of First Refusal will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your option, the Company reserves the right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Right of First Refusal, the agent will deliver to you the shares and any other property no longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Right of First Refusal, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within 30 days after payment by the Company for the Offered Shares, the escrow agent will deliver the Offered Shares that the Company has repurchased to the Company and will deliver the payment received from the Company to you.

12. OPTION NOT A SERVICE CONTRACT. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to

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continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

13. WITHHOLDING OBLIGATIONS.

(a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence shall not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

14. TAX CONSEQUENCES. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. Because the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the "fair market value" as subsequently determined by the Internal Revenue Service.

15. NOTICES. Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

16. GOVERNING PLAN DOCUMENT. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control.

ATTACHMENT II
2016 EQUITY INCENTIVE PLAN, AS AMENDED

ATTACHMENT III
NOTICE OF EXERCISE

LIQUIDIA TECHNOLOGIES, INC.
NOTICE OF EXERCISE

Liquidia Technologies, Inc.
419 Davis Dr.
Morrisville, North Carolina 27560

Date of Exercise:

This constitutes notice to LIQUIDIA TECHNOLOGIES, INC. (the "Company") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "Shares") for the price set forth below.

Table with 3 columns: Type of option (check one), Incentive o, Nonstatutory o. Rows include Stock option dated, Number of Shares as to which option is exercised, Certificates to be issued in name of, Total exercise price, Cash payment delivered herewith, Regulation T Program (cashless exercise(1)), Value of Shares delivered herewith(2).

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2016 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing

within 15 days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two years after the date of grant of this option or within one year after such Shares are issued upon exercise of this option.

I hereby make the following certifications and representations with respect to the number of Shares listed above, which are being acquired by me for my own account upon exercise of the option as set forth above:

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- (1) Shares must meet the public trading requirements set forth in the option agreement.
 - (2) Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.
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I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), and are deemed to constitute "restricted securities" under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling said Shares, except as permitted under the Securities Act and any applicable state securities laws.

I further acknowledge that I will not be able to resell the Shares for at least 90 days after the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934) under Rule 701 and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the option shall have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Company's Articles of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2711 or NYSE Member Rule 472 or any successor or similar rule or regulation) (the "**Lock-Up Period**"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

(Signature)

Name (Please Print)

Address of Record:

AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT

This **AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT** (the “**Agreement**”) is entered into effective January 31, 2018 (the “**Effective Date**”), by and between Neal Fowler (the “**Executive**”) and Liquidia Technologies, Inc., a Delaware corporation (the “**Company**”). Each of the Company and Executive is a “**Party**” and, collectively, they are the “**Parties**.”

The Company and Executive entered into an Executive Employment Agreement effective March 10, 2008 (the “**Prior Agreement**”); and

The Company and Executive have agreed to amend and restate the Prior Agreement as set forth in this Agreement to reflect certain adjustments to Executive’s employment relationship with the Company.

Accordingly, in consideration of the mutual promises and covenants contained herein, the Parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 **At-Will Employment.** Executive shall be employed by the Company on an “at will” basis, meaning either the Company or Executive may terminate Executive’s employment at any time, with or without cause or advance notice. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the “at will” nature of Executive’s employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive’s rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 **Position.** Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Executive Officer, and Executive hereby accepts such employment. Executive will report to the Board of Directors of the Company (the “**Board**”) and/or such board members or committees designated by the Board. The Company shall use its best efforts to cause Executive to be elected to the Board during Executive’s employment with the Company.

1.3 **Duties.** Executive shall faithfully perform all duties of the Company related to the position or positions held by Executive, including but not limited to all duties set forth in this Agreement and in the Bylaws of the Company related to the position or positions held by Executive, and all additional duties that are reasonably prescribed from time to time by the Board or other designated officers of the Company. Executive shall devote Executive’s full business time and attention to the performance of Executive’s duties and responsibilities on behalf of the Company and in furtherance of its best interests. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s corporate headquarters in North Carolina. In addition, Executive shall make such business trips at the Company’s expense to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 **Company Policies.** Executive shall comply with all Company written policies, standards, rules and regulations (a “**Company Policy**” or collectively, the “**Company Policies**”) and all applicable government laws, rules and regulations that are now or hereafter in effect. Executive acknowledges receipt of copies of all written Company Policies that are in effect as of the date of this Agreement. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 **Salary.** Executive shall receive a base salary of \$480,000 on an annualized basis, payable subject to standard federal and state payroll withholding requirements in accordance with the Company’s standard payroll practices (“**Base Salary**”). Executive’s Base Salary may be increased from time to time by the Board. Notwithstanding anything to the contrary, the Base Salary may be reduced if the Board determines such reduction is necessary and justified by the financial condition of the Company and implements an equal percentage reduction in the base salaries of all of the Company’s executive officers, but in no event will such reduction be greater than ten percent (10%) of the Base Salary. A reduction in Executive’s Base Salary in accordance with the immediately preceding sentence shall not constitute a material diminution in Base Salary as described in Section 6.4(b) of this Agreement.

2.2 **Bonus.** During the period Executive is employed with the Company, Executive shall be eligible to earn for Executive’s services to be rendered under this Agreement a discretionary annual cash bonus target equal to 50% of Base Salary (“**Bonus Target**”), subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements. Whether or not Executive earns any bonus will be dependent upon (a) Executive’s continuous performance of services to the Company through the date any bonus is paid, except as set forth in Section 6.1(b) and Section 6.6 below; and (b) the actual achievement by Executive and the Company of the applicable performance targets and goals set by the Board in advance of, or within the first quarter of, each calendar year. The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. The Board will determine in its reasonable discretion the extent to which Executive and the Company have achieved the performance goals upon which the bonus is based and the amount of the bonus, which could be above or below the Bonus Target (and may be zero). Any bonus shall be subject to the terms of any applicable incentive compensation plan adopted by the Company. Any bonus, if earned, will be paid to Executive within the time period set forth in the incentive compensation plan, or if no such time period was established, within two and one-half months following the end of the year during which the bonus is earned.

2.3 **Benefits.** Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion.

2.4 **Expense Reimbursement.** The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in

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accordance with Company Policy, as in effect from time to time. In addition, during Executive’s employment, the Company agrees that it will provide Executive with payments related to his personal financial and estate planning in an amount not to exceed \$2,500 per year (“**Financial Services Reimbursements**”) which amount(s) shall be subject to applicable withholding and employment taxes and shall be paid within thirty (30) days after Executive provides proper documentation of such expenses. For the avoidance of doubt, to the extent that any reimbursements or (including but not limited to the Financial Services Reimbursements) payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the “**Code**”): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. The Parties have entered into a Confidentiality, Inventions and Non-Competition Agreement (the “**Confidential Information Agreement**”), which may be amended by the Parties from time to time without regard to this Agreement. The Confidential Information Agreement contains provisions that are intended by the Parties to survive and do survive termination of this Agreement.

3.1 **Permissible Communications.** Notwithstanding anything to the contrary in the Confidential Information Agreement, Executive acknowledges that nothing in the Confidential Information Agreement shall be construed to prohibit Executive from (a) filing a charge or complaint with, or participating in any proceeding before, a government agency authorized to enforce and investigate suspected violations of federal anti-discrimination laws, labor relations laws, occupational health and safety laws, wage and hour laws, and such similar state or local laws; (b) reporting possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, or (c) responding truthfully to inquiries from, or otherwise cooperating with, any governmental or regulatory investigation (the activities set forth in clauses (a) through (c) are collectively referred to as the “**Protected Activities**”). Executive understands that in connection with such Protected Activity, Executive is permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company; *provided, however*, that Executive agrees to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Proprietary Information under the Confidential Information Agreement to any parties other than the appropriate government agencies. Executive further understands that “Protected Activity” does not include the disclosure of any Company attorney-client privileged communications, and that any such disclosure without the Company’s written consent shall constitute a material breach of this Agreement.

3.2 **Defend Trade Secrets Act.** Pursuant to the Defend Trade Secrets Act of 2016, Executive acknowledges that Executive will not have criminal or civil liability under any Federal or State trade secret law for the disclosure of a trade secret that (a) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney and

(ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in

a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney and may use the trade secret information in the court proceeding, if Executive (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Except with the prior written consent of the Company, which shall not be unreasonably withheld, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder, except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties, (iii) reasonable time devoted to service on the board of directors of up to two (2) companies that are not competitive with the Company, and (iv) such other activities as may be specifically approved by the Company. This restriction shall not, however, preclude Executive from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive's performance of all the terms of this Agreement and as an executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. TERMINATION OF EMPLOYMENT. The Parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 Termination by the Company Without Cause.

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below) by giving thirty (30) days' advance notice as described in Section 7.1 of this Agreement; *provided, however*, that the Company may elect for you to be on leave or to perform modified duties at any time between the date of notice and the date of termination. A termination pursuant to Sections 6.3 and 6.5 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined

under Treasury Regulation Section 1.409A-1(h) a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, then Executive shall also be entitled to receive (collectively, the "**Severance Benefits**"):

(i) an amount equal to Executive's then current Base Salary for twelve (12) months (the "**Severance Period**"), less all applicable withholdings and deductions, paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter;

(ii) an amount equal to the bonus that Executive would have earned pursuant to Section 2.2 if Executive had remained employed through the end of the applicable fiscal year in which the termination date occurs, pro-rated based on the number of days that Executive was employed with the Company during the applicable fiscal year, payable on the date that such bonus is paid to the Company's other executives; and

(iii) payment of the employer portion of the premiums required to continue Executive's group health care coverage under the applicable provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("**COBRA**"), provided that Executive timely elects to continue coverage under COBRA, until the earliest of (A) the close of the Severance Period, (B) the expiration of Executive's eligibility for the continuation coverage under COBRA, or (C) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment (such period from the termination date through the earliest of (A), (B) or (C), the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines in its sole discretion that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code, or any statute or regulation of similar effect (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings for the remainder of the COBRA Payment Period, regardless of whether Executive elects COBRA coverage (the "**Special Severance Payment**"). Executive may, but is not obligated to, use such Special Severance Payment toward the cost of COBRA premiums. If Executive becomes eligible for coverage under another employer's group health plan or otherwise ceases to be eligible for COBRA during the COBRA Payment Period, Executive must immediately notify the Company of such event, and all payments and obligations under this clause will cease.

(c) Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to Section 6.1(b) of this Agreement if: (i) Executive signs and delivers to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**"), by the 60th day following the termination date or such earlier date as set forth in the Release, which cannot be revoked in whole or part (if applicable) by such date or such earlier

date as set forth in the Release (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property in proper order and condition, reasonable wear and tear excepted, (including, but not limited to, all books, documents, papers, materials and any other property or assets relating to the business or affairs of the Company which may be in Executive's possession or under his control but excluding copies of records related to Executive's compensation from the Company and any equity ownership in the Company); (iv) Executive complies with all post-termination obligations under this Agreement and the Confidential Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in the Release. Upon termination of this Agreement and Executive's employment hereunder for any reason by either Party, Executive shall also be deemed to have resigned as a member of the Board. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of Severance Benefits will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this Section 6.1 is in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 Termination by the Company for Cause.

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 7.1 of this Agreement.

(b) "**Cause**" for termination shall mean that Executive has engaged in any of the following: (i) any material breach of the terms of this Agreement by Executive, or the willful failure of Executive to diligently and properly perform Executive's material duties for the Company; (ii) Executive's misappropriation or unauthorized use of the Company's tangible or intangible property that causes or is likely to cause material harm to the Company or its reputation, or material breach of the Confidential Information Agreement or any other similar agreement

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regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (iii) any material failure to comply with the Company Policies or any other policies and/or directives of the Board; (iv) Executive's use of illegal drugs or any illegal substance, or Executive's use of alcohol in any manner that materially interferes with the performance of Executive's duties under this Agreement; (v) any dishonest or illegal action (including, without limitation, embezzlement) or any other action, whether or not dishonest or illegal, by Executive which is willful and materially detrimental to the interest and well-being of the Company, including, without limitation, harm to its reputation; (vi) Executive's failure to fully disclose any material conflict of interest Executive may have with the Company in a transaction between the Company and any third party which is materially detrimental to the interest and well-being of the Company; (vii) any willful adverse action or omission by Executive which would be required to be disclosed pursuant to public securities laws or which would limit the ability of the Company or any entity affiliated with the Company to sell securities under any Federal or state law or which would disqualify the Company or any affiliated entity from any exemption otherwise available to it; or (viii) Executive's material violation of the Company's Policies prohibiting unlawful harassment, discrimination, retaliation, or workplace violence; *provided, however*, that prior to any termination of Executive for "Cause," if the grounds for such Cause are reasonably capable of cure by Executive, the Company shall provide Executive with written notice of the grounds for Cause and provide Executive with thirty (30) business days in which to cure such Cause. Provided further that no act or failure to act on Executive's part shall be considered "willful" unless the Board determines it was done, or was omitted to be done, by Executive in bad faith or in a manner that Executive could not have reasonably believed to be in the best interest of the Company.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.3 **Resignation by Executive.**

(a) Executive may resign from Executive's employment with the Company at any time by giving thirty (30) days' advance notice as described in Section 7.1, *provided* that the Company may set a termination date at any time between the date of notice and the date of resignation, in which case Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period.

(b) In the event Executive resigns from Executive's employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

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6.4 **Resignation by Executive for Good Reason.**

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior consent: (i) a material diminution in Executive's authority, duties or responsibilities; (ii) a material diminution in Executive's Base Salary or Bonus Target; (iii) a requirement that Executive report to a corporate officer or employee instead of reporting directly to the Board; (iv) Executive's principal place of employment is relocated by more than twenty-five (25) miles from the Company's present location in Research Triangle Park, North Carolina; or (v) the Company materially breaches its obligations under this Agreement. In addition to any requirements set forth above, in order for any of the above events to constitute "Good Reason," Executive must (X) inform the Company of the existence of the event within sixty (60) days of the initial existence of the event, after which date the Company shall have no less than thirty (30) days to cure the event which otherwise would constitute "Good Reason" hereunder and (Y) Executive must terminate his employment with the Company for such "Good Reason" no later than ninety (90) days after the initial existence of the event which prompted Executive's termination. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.1(c) above, Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1 and on the same terms and conditions set forth in Section 6.1(c) and Section 6.1(e) as if Executive had been terminated by the Company without Cause.

(d) Any damages caused by the termination of Executive's employment for Good Reason would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.5 **Termination by Virtue of Death or Disability of Executive.**

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because a qualified medical doctor mutually acceptable to the Company and Executive or Executive's personal representative has certified in writing that:

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(A) Executive is unable, because of a medically determinable physical or mental disability, to perform the essential functions of Executive's job, with or without a reasonable accommodation, for more than one hundred and eighty (180) calendar days measured from the last full day of work; or (B) by reason of mental or physical disability, it is unlikely that Executive will be able, within one hundred and eighty (180) calendar days, to resume the essential functions of Executive's job, with or without a reasonable accommodation, and to otherwise discharge Executive's duties under this Agreement. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 **Change in Control Benefits.** In the event the Company (or any surviving or acquiring corporation) terminates Executive's employment without Cause or Executive resigns for Good Reason within twelve (12) months following the effective date of a Change in Control (as defined under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as may be amended from time to time by the Company (the "**Plan**")), then Executive shall be entitled to the Accrued Obligations and, provided that Executive complies with the obligations in Section 6.1(c) of this Agreement (including the requirement to provide an effective Release), Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1(b) and on the same conditions as if Executive had been terminated by the Company without Cause; *provided, however*, that (a) the Severance Period shall be increased to eighteen (18) months; (b) the bonus set forth in Section 6.1(b)(ii) shall instead equal 50% of Base Salary multiplied by 1.5; and (c) in the event that Executive's outstanding equity as of the closing of the Change in Control is assumed or continued (in accordance with its terms) by the surviving entity in a Change in Control, then 100% of the unvested portion of such equity shall become vested.

6.7 **Cooperation With Company After Termination of Employment.** Following termination of Executive's employment for any reason and for a period of one (1) year thereafter, Executive agrees to cooperate (a) with the Company in (i) the defense of any legal matter involving any matter that arose during Executive's employment with the Company, and (ii) all matters relating to the winding up of Executive's pending work and the orderly transfer of any such pending work to such other employees as may be designated by the Company; and (b) with all government authorities on matters pertaining to any investigation, litigation or administrative proceeding pertaining to the Company. The Company will reimburse Executive for any reasonable

travel and out of pocket expenses incurred by Executive in providing such cooperation. The Company will also pay Executive a per diem amount equal to Executive's Base Salary as of the date of termination divided by two hundred and thirty (230) for each day or partial day that Executive devotes to fulfilling his obligation to cooperate under this Section 6.7, unless Executive is then receiving continued payment of his Base Salary under 6.1(b)(ii), above. Following termination of Executive's employment for any reason, and in the event of a failure by Executive (following reasonable efforts by the Company to secure his voluntary cooperation) to resign from any position as officer or director of the Company, with such resignation to be effective no later than the date of Executive's termination date (or such other date as requested by the Board), the Company is hereby irrevocably authorized to appoint its then-current Chief Executive Officer to act in Executive's name and on his behalf to execute any documents and to

do all things reasonably necessary to effect such resignation. Further, Executive shall not, at any time after termination of Executive's employment for any reason, represent himself as being an agent or representative of the Company, unless expressly authorized in a written agreement executed by an authorized officer of the Company.

6.8 Application of Section 409A.

(a) It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms.

(b) The preceding provisions shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. In the event that the terms of this Agreement would subject Executive to any additional tax, penalty or interest under Section 409A (the "**409A Penalties**"), the Company and Executive shall cooperate in good faith to amend the terms of this Agreement to avoid such 409A Penalties, if possible. The Company shall not be liable to Executive for any payment made under this Agreement which is determined to result in an additional tax, penalty or interest under Section 409A, nor for reporting in good faith any payment as an amount includible in gross income under Section 409A.

(c) No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

(d) For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment.

(e) If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance Benefits will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (1) pay to Executive a lump sum amount equal to the sum of the Severance Benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the Severance Benefits had not been delayed pursuant to this Section 6.8, and (2) commence paying the balance of the Severance Benefits in accordance with the applicable

payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.8.

6.9 Parachute Payments.

(a) Notwithstanding any other provisions of this Agreement to the contrary, in the event that it shall be determined that any payment or distribution to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (a "**Payment**") would be nondeductible by the Company for Federal income tax purposes because of Section 280G of the Code, the Company shall reduce the aggregate present value of the Payments under this Agreement to the Reduced Amount (as defined below) if, and only if, reducing the Payments under this Agreement will provide Executive with a greater net after-tax amount than would be the case if no such reduction was made, taking into account the applicable federal, state, local and foreign income, employment and other taxes, including the excise tax imposed by Section 4999 of the Code. If a reduction in the Payments is necessary, such reduction shall occur in the following order: (1) reduction of cash payments; (2) cancellation of accelerated vesting of equity awards other than stock options; (3) cancellation of accelerated vesting of stock options; and (4) reduction of other benefits paid to Executive. Within any such category of payments and benefits (that is, clauses (1), (2), (3) or (4) of this Section 6.9(a)), a reduction shall occur first with respect to amounts that are not "deferred compensation" within the meaning of Section 409A of the Code and then with respect to amounts that are. The "**Reduced Amount**" shall be an amount expressed in present value that maximizes the aggregate present value of Payments under this Agreement without causing any Payment to be nondeductible by the Company because of Section 280G of the Code.

(b) All determinations to be made under this Section 6.9 shall be made at the Company's expense by a firm of certified public accountants of national standing selected by the Company (the "**Accounting Firm**") which may be the firm regularly auditing the financial statements of the Company. The Company and Executive shall furnish to the Accounting Firm such information and documents as the Accounting Firm may reasonably require in order to make a determination under this Section. To the extent requested by Executive, the Company shall cooperate with Executive in good faith in valuing, and the Accounting Firm shall value, services to be provided by Executive (including refraining from performing services pursuant to a covenant not to compete) before, on or after the date of the transaction which cause the application of Section 280G of the Code such that payments in respect of such services may be considered to be "reasonable compensation" within the meaning of the regulations under Section 280G of the Code. In making its determinations hereunder, the Accounting Firm shall apply reasonable, good faith interpretations regarding the applicability of Section 280G and Section 4999, along with any other applicable portions of the Code or other tax laws. The Accounting Firm shall make all determinations required to be made under this Section and shall provide detailed supporting calculations to the Company and Executive within 30 days after the Termination Date or such earlier time as is requested by the Company, and provide an opinion to Executive that he or she has substantial authority not to report any excise tax on his or her Federal income tax return with respect to any Payments. Any such determination by the Accounting Firm shall be binding upon the Company and Executive. Subject to Sections 6.1(c) and 6.9, within five business days thereafter, the Company shall pay to or distribute to or for the benefit of Executive such amounts as are then due to Executive under this Agreement.

(c) As a result of the uncertainty in the application of Section 280G of the Code at the time of the initial determination by the Accounting Firm or the Company hereunder, it is possible that Payments, as the case may be, will have been made by the Company which should not have been made ("**Overpayment**") or that additional Payments, as the case may be, which will not have been made by the Company could have been made ("**Underpayment**"), in each case, consistent with the calculations required to be made hereunder. In the event that the Accounting Firm, based upon the assertion of a deficiency by the Internal Revenue Service against Executive which the Accounting Firm believes has a high probability of success determines that an Overpayment has been made, promptly on notice and demand Executive shall repay to the Company any such Overpayment paid or distributed by the Company to or for the benefit of Executive together with interest at the applicable Federal rate provided for in Section 7872(f)(2)(A) of the Code; provided, however, that no such amount shall be payable by Executive to the Company if and to the extent such payment would not either reduce the amount on which Executive is subject to tax under Section 1 and Section 4999 of the Code or generate a refund of such taxes. In the event that the Accounting Firm, based upon controlling precedent or other substantial authority, determines that an Underpayment has occurred, any such Underpayment shall be promptly paid by the Company to or for the benefit of Executive together with interest at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code.

7. GENERAL PROVISIONS.

7.1 Notices. Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the Party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 **Severability.** Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 **Survival.** Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the Parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

7.4 **Waiver.** If either Party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

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7.5 **Complete Agreement.** This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company, subject to the approval of the Board, its compensation committee or (if necessary) the stockholders of the Company. The Parties have entered into a separate Confidential Information Agreement and have entered or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the Parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the Parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 **Headings.** The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 **Successors and Assigns.** The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a Party, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Executive's estate upon death.

7.8 **Withholding.** All amounts payable hereunder shall be subject to applicable tax withholding.

7.9 **Choice of Law.** This Agreement in all respects shall be governed by and interpreted in accordance with the laws of the State of North Carolina, both procedural and substantive, without regard to conflicts of law, except to the extent that federal laws and regulations preempt otherwise applicable law.

7.10 **Mandatory Mediation.** Prior to and as a condition of either Party's filing suit in state or federal court, the Parties shall engage in a mediated settlement conference in accordance with the North Carolina Superior Court Rules Implementing Statewide Mediation. The Parties shall mediate in good faith until settlement is reached or an impasse is declared by the mediator.

7.11 **Jurisdiction.** Each Party hereby irrevocably submits to the exclusive jurisdiction of the United States District Court located in Wake County, North Carolina, or any state court located within such state, in respect of any claim relating to this Agreement or Executive's employment with the Company, and hereby waives, and agrees not to assert, as a defense in any action, suit or proceeding in which any such claim is made that said Party is not subject thereto or that such action, suit or proceeding may not be brought or is not maintainable in such courts or that the venue thereof may not be appropriate or that this Agreement may not be enforced in or

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by such courts. Any appellate proceedings shall take place in the appropriate courts having appellate jurisdiction over the courts set forth in this Section.

7.12 **Counterparts.** This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one Party, but all of which taken together will constitute one and the same Agreement. Facsimile signatures and signatures transmitted by PDF shall be equivalent to original signatures.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

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IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first written above.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Dr. Seth Rudnick
Name: Dr. Seth Rudnick
Title: Chairman of the Board

Executive:

/s/ Neal Fowler
Neal Fowler

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Exhibit A

CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

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CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

STATEMENT OF PURPOSE

The Employee desires to be employed by the Company, and the Company is willing to employ Employee strictly subject to Employee’s agreement to be bound by the terms of this Agreement.

IN CONSIDERATION of the Company’s employment of the Employee and the compensation and other benefits that the Company may provide to Employee as an employee, the Employee, intending to be legally bound, agrees to the following:

1. For purposes of this Agreement, “**Proprietary Information**” is information (whether in written or other form or whether or not patentable or protectable by copyright, trade secret, trade dress, trademark, or the like) that: (i) has been created, invented, discovered, or developed by the Employee in connection with the Employee’s employment by the Company; (ii) is non-public and has been disclosed, furnished, or communicated to the Employee in connection with the Employee’s employment by the Company; or (iii) is non-public and the unauthorized disclosure of which could be detrimental to the interests of the Company. Proprietary Information includes, but is not limited to, all inventions, works of authorship, trade secrets, know how, proprietary or confidential information, including, but not limited to, research, product or business plans, products, services, projects, proposals, processes, formulas, ideas, data, compositions, technology, computer programs and related source code and object code, developments, designs, drawings, marketing information and plans, customer lists, budgets, projections, partners, cost analyses, acquisition candidates, relevant parts of analysis, reviews, compilations, studies or other records and documents, and other information owned by the Company, disclosed to the Employee, or to which the Employee has been provided access or gains access, either directly or indirectly, by any means. Proprietary Information does not include information that is or becomes generally available to the public other than as a result of a disclosure by the Employee or by any other person or entity that is under a confidentiality obligation to Company with respect to such information.

2. Nondisclosure of Proprietary Information.

2.1 The Employee acknowledges and agrees that Proprietary Information is the sole property of the Company or its designee and that the Employee shall have no right,

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title, license, or interest in or to any Proprietary Information. During and after the Employee’s employment by the Company, the Employee shall keep in the strictest confidence and trust all Proprietary Information and shall not directly or indirectly disclose, distribute, copy, supply, or use, in whole or in part, any Proprietary Information except as approved in advance in writing by the Company. Notwithstanding the foregoing, it is understood that, at all such times, the Employee is free (i) to use information which was known to the Employee prior to employment with the Company or which is generally known in the trade or industry through no breach of this Agreement or other act or omission by the Employee, (ii) to discuss the terms of the Employee’s employment, wages and working conditions to the extent expressly protected by applicable law, (iii) to report possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, (iv) to respond to inquiries from, or otherwise cooperate with, any governmental or regulatory investigation, or (v) to testify truthfully as compelled by lawful process or subpoena related to such testimony after the Employee has provided advance written notice of said subpoena to the Company’s Chief Executive Officer and reasonably cooperates with the Company in any process to oppose said subpoena.

2.2 The Employee shall not use or disclose to the Company, or assist in the disclosure to the Company of, proprietary or confidential information belonging to any third parties, including any prior employer(s).

2.3 The Employee acknowledges and agrees that the Company has received and in the future may receive from third parties, including, but not limited to, potential collaborating partners or customers of the Company, confidential or proprietary information (“**Third Party Information**”) 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. During the term of the Employee’s employment with the Company and thereafter, the Employee will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than Company personnel or the Company’s designee who need to know such information in connection with their work for the Company or such third party) or use Third Party Information, except in connection with the Employee’s work for the Company or such third party, unless expressly approved in advance in writing by the Company. The Employee further agrees to be bound by and subject to any confidentiality or nondisclosure agreements or clauses with respect to such Third Party Information between the Company and any such third party.

2.4 Pursuant to the Defend Trade Secrets Act of 2016, the Employee acknowledges that the Employee will not have criminal or civil liability under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (a) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney and (b) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if the Employee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Employee may

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disclose the trade secret to the Employee’s attorney and may use the trade secret information in the court proceeding, if the Employee (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

3. Upon the earliest to occur of (i) termination of the Employee’s employment by the Company for any reason, (ii) termination of the Employee’s access to Proprietary Information, or (iii) the request of the Company, the Employee shall return to the Company (and will not keep in Employee’s possession or control or deliver to anyone else) all materials belonging to the Company, whether kept at the Employee’s business office, personal residence or otherwise, including, but not limited to, all materials containing or relating to any Proprietary Information in any written, tangible, electronic or other form that the Employee may have in Employee’s possession or control, and any and all mobile telephones, personal digital assistants, pagers, computer and other electronic devices and credit cards. After returning the materials and equipment described in the preceding sentence to the Company, the Employee shall not retain any copies of any such materials.

4. Ownership of Proprietary Information.

4.1 All Proprietary Information and other information, which by its nature is proprietary to the Company, relating to the Company’s business or the Company’s anticipated business, or based on, derived from or relating to any Proprietary Information (collectively, Proprietary Information and “**Work Product**”) shall be the sole property of the Company. The Employee agrees that all Proprietary Information and Work Product created, conceived, reduced to practice, made or otherwise developed by the Employee, solely or jointly, during and in any way related to the Employee’s employment, shall be the exclusive property of the Company and/or its designees or assignees, and shall be deemed “works made for hire,” as that term is defined in Section 101 of the U.S. Copyright Act of 1976, as amended.

4.2 If, for any reason, any Proprietary Information and Work Product does not qualify as works made for hire, the Employee shall assign and does hereby irrevocably, unconditionally, and without encumbrance of any kind assign to the Company, and forever waives and agrees never to assert, all right, title, and interest, including without limitation, all patent, trademark, copyright, trade secret, and other intellectual property (collectively, “**Intellectual Property**”) rights, in and to such Proprietary Information and Work Product. The Employee shall assist the Company, or its designee, in every proper way to secure the Company’s rights in the Proprietary Information and Work Product and any Intellectual Property rights relating thereto in any and all countries, including (i) the disclosure to the Company of all pertinent information and data with respect thereto, (ii) the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company or its designee the sole and exclusive right, title and interest in and to the Proprietary Information and Work Product, and (iii) the defense of any claim, demand, action, litigation, suit, or other proceeding,

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including, but not limited to, interference, cancellation, opposition, or other proceedings in respect of such applications or any registrations or patents issuing therefrom. The Employee shall continue such assistance after the termination of the Employee’s employment by the Company.

4.3 During the Employee's employment by the Company, the Employee shall report promptly to the Company all Proprietary Information and Work Product created, conceived, reduced to practice, or otherwise developed by the Employee, solely or jointly.

4.4 If the Company is unable because of the Employee's mental or physical incapacity or for any other reason to secure the Employee's signature to apply for or to secure protection of any Proprietary Information and Work Product, then the Employee hereby designates and appoints the Company and its duly authorized officers and agents as its agents and attorneys-in-fact to execute and file any certificates, applications or documents and to do all of their lawful acts necessary to perfect and protect the Company's rights in the Proprietary Information and Work Product. The Employee expressly acknowledges that the foregoing power of attorney is coupled with an interest and is therefore irrevocable and shall survive the Employee's death or incompetency and the termination of the Employee's employment or engagement by the Company.

4.5 The Employee hereby represents and warrants that the Employee has fully disclosed to the Company on Schedule A attached hereto any idea, invention, discovery or process relating to the Company's business which, prior to the Employee's employment with the Company, the Employee conceived, reduced to practice, or developed, individually or jointly, and is to be excluded from the scope of this Agreement.

4.6 Notwithstanding anything in this Agreement to the contrary, the obligation of the Employee to assign or offer to assign the Employee's rights in an invention to the Company shall not extend or apply to an invention that the undersigned developed (i) entirely on the Employee's own time; (ii) without using Company equipment, supplies, facilities, or other resources, Proprietary Information or trade secret information unless such invention (a) relates to the Company's business or actual or demonstrably anticipated research or development, or (b) results from any work performed by the Employee for the Company. The Employee shall bear the burden of proof in establishing that the Employee's invention qualifies for exclusion under this Section 4.6.

5. Covenant Not To Compete.

5.1 For purposes of Part 5 of this Agreement, including each of its subparts, the following terms shall have the following meanings:

a. "**Competing Business**" shall mean any corporation, partnership, person, or other entity that is researching, developing, manufacturing, marketing, distributing, or selling any product, service, or technology that is competitive with any part of the Company's Business.

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b. The "**Company's Business**" shall mean the development, manufacture, marketing, distribution, or sale of, including research directed to, any product, service, or technology that the Company is developing, manufacturing, marketing, distributing, or selling or to which the Company directed research at any time during Employee's employment with the Company. As of the date of this Agreement, the Company's Business includes, but is not limited to, research directed to and the development, manufacture, marketing, distribution, and/or sale of: (i) isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold; (ii) size and/or shape controllable pharmaceutical or therapeutic particles molded using a polymer or low surface energy mold; (iii) film based products of or containing arrays of size and/or shape controlled structures molded from a low surface energy mold; (iv) isolated nano or micro size and/or shape controlled particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled particles fabricated from a mold; (v) nano or micro size and/or shape controllable particles molded using a polymer or low surface energy mold; or (vi) patterned drum fabrication and mold for manufacturing the products of (i)-(v) above. The Employee understands that during the Employee's employment with the Company, the Company's Business may expand or change, and the Employee agrees that any such expansions or changes shall expand or contract the definition of the Company's Business and the Employee's obligations under this Agreement accordingly.

c. "**Territory**" shall mean the following severable geographic areas: (i) the world, (ii) any country in which the Company or a Competing Business is engaged in business, (iii) any country in which the Company is engaged in business, (iv) the United States, Europe, and Asia, (v) the United States, (vi) any state, including the District of Columbia, in which the Company or a Competing Business is engaged in business, (vii) any state, including the District of Columbia, in which the Company is engaged in business, (viii) North Carolina, (ix) a one hundred mile radius of the Employee's principal place of employment or work for the Company, or (x) a one hundred mile radius of the Company's corporate headquarters.

5.2 It is recognized and understood by the Employee that, through the Employee's association with the Company, the Employee shall: (i) have access to trade secrets and confidential information of the Company, including, but not limited to, valuable information about its intellectual property, business operations and methods, and the persons with which it does business in various locations throughout the world, that is not generally known to or readily ascertainable by the Company's competitors, (ii) develop relationships with the Company's customers and others with which the Company does business, and these relationships are among the Company's most important assets, (iii) receive specialized knowledge of and specialized training in the Company's Business, and (iv) gain such knowledge of the Company's Business that, during the course of the Employee's employment with the Company and for a period of one year following the termination thereof, the Employee could not perform services for a Competing Business

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without inevitably disclosing the Company's trade secrets and Proprietary Information to that Competing Business.

5.3 While employed by the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise) for any Competing Business, (ii) engage in any activities (or assist others to engage in any activities) that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing or prospective customers, suppliers, business partners, or contractors of the Company to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, or (v) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company.

5.4 For a period of one year following the termination of the Employee's employment with the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise), within the Territory for any Competing Business, that are the same or substantially similar to any services that the Employee performed for the Company or that otherwise utilize skills, knowledge, and/or business contacts and/or relationships that the Employee developed while providing services to the Company, (ii) engage in any activities (or assist others to engage in any activities) within the Territory that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or any prospective customers to whom the Company has made a written proposal ("Prospective Customers"), suppliers, business partners, or contractors of the Company, during the last year of the Employee's employment with the Company, to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, (v) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company, (vi) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company. Where a Competing Business is a large enterprise with separately operated business units, the restrictions in Section 5.4(i) shall not apply to any such business unit that has no involvement in the research, development, manufacture, marketing, distribution, or sale of a product, service, or technology that is competitive with any part of the Company's Business; *provided, however*, that this sentence does not apply to any employees in a scientific role or whose role involves the research, development or maintenance of the Company's trade secrets. These obligations will continue for the specified period regardless of whether the termination of the Employee's

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employment was voluntary or involuntary or with or without cause, and the specified period shall be tolled and shall not run during any time in which the Employee fails to abide by this obligations.

5.5 The Employee shall not at any time following the termination of the Employee's employment with the Company use the name or trading style of the Company in any country, or use in any country any name or trading style which is the same as or similar to any of the trade or service marks of the Company or any brand name or proposed brand name of any of the Company's products or proposed products, or represent himself or herself as carrying on or continuing or being connected with the Company or its business for any purpose whatsoever unless otherwise agreed by the Company in writing.

5.6 While employed by the Company, the Employee shall disclose to the audit committee of the Company the Employee's interest in respect of any contract or arrangement in which the Employee has any personal material interest, directly or indirectly, or any conflicts of interest (including the conflict of interest that may arise from the Employee's directorship(s) or executive position or personal investments in any corporation(s)) that may involve the Employee. Upon such disclosure, the Employee shall abstain from voting in respect of any such contract, arrangement, proposal, transaction, or matter in which the conflict of interest arises, unless and until the audit committee has determined that no such conflict of interest exists.

5.7 As an exception to the restrictions set forth in Parts 5.3 and 5.4 herein, the Employee may own passive investments in a Competing Businesses, (including, but not limited to, indirect investments through mutual funds), provided that the securities of the Competing Business are publicly traded and the Employee does not own or control more than two percent of the outstanding voting rights or equity of the Competing Business.

5.8 In the event that a court determines that the length of time, the geographic area, or the activities prohibited under this Agreement are too restrictive to be enforceable, the Court may reduce the scope of the restriction to the extent necessary to make the restriction enforceable.

5.9 The market for the Company's services and the Company's Business is highly specialized and highly competitive such that other companies and business entities compete with the Company in various locations throughout the world. The provisions set forth in this Agreement: (i) are reasonably necessary to protect the Company's legitimate business interests, (ii) are reasonable as to the time, territory, and scope of activities that are restricted, (iii) do not interfere with the Employee's ability to earn a comparable living or secure employment in the field of the Employee's choice, (iv) do not interfere and are not inconsistent with public policy or the public interest, and (v) are described with sufficient accuracy and definiteness to enable the Employee to understand the scope of the restrictions on the Employee.

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5.10 Because of the unique nature of the Proprietary Information, the Employee understands and agrees that the Company will suffer irreparable harm in the event that the Employee fails to comply with any of the Employee's obligations under this Agreement and that monetary damages will be inadequate to compensate the Company for such breach. Accordingly, the Employee agrees that the Company will, in addition to any other remedies available to it at law or in equity, be entitled to injunctive relief to enforce the terms of this Agreement.

6. The Employee hereby authorizes the Company to provide a copy of this Agreement, including any exhibits hereto, to any and all of the Employee's future employers and to notify any and all such future employers that the Company intends to exercise its legal rights arising out of or in connection with this Agreement and/or any breach or any inducement of a breach hereof.

7. The Employee agrees that, during the term of the Employee's employment with the Company, the Employee will not: (i) engage in any other employment, occupation, consulting, or other business activity that conflicts with the Employee's obligations to the Company, or (ii) engage in any other activities that conflict with the Employee's obligations to the Company.

8. Debarment Certification

8.1 The Employee represents and promises that Employee:

- (a) is not presently, and during the Employee's employment will not be, debarred or convicted for a crime for which Employee can be debarred under the Generic Drug Enforcement Act of 1992 (21USC335a)(the "Act"); and
- (b) is not presently, and during the Employee's employment will not be, indicted or otherwise criminally or civilly charged by a government entity (Federal or State) with commission of the kinds of conduct for which Employee can be debarred under the Act; and
- (c) will not employ or otherwise engage any individual who has been (i) debarred or (ii) convicted of a crime for which a person can be debarred under the Act, in any capacity in connection with the activities of developing or reporting data which may become part of an application for approval of a drug or biologic.

8.2 The Employee promises that, during the Employee's employment with the Company, the Employee will promptly notify the Company upon learning of or having a belief that the Employee cannot satisfy the obligations of Section 8.1 above.

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9. The Employee agrees that this Agreement shall be enforced, construed and interpreted under the law of the state of North Carolina, without regard to the conflicts of laws principles thereof. The state and federal courts in North Carolina shall be the exclusive venues for the adjudication of all disputes arising out of this Agreement, and the Employee consents to the exercise of personal jurisdiction over the Employee in any such adjudication and hereby waives any and all objections and defenses to the exercise of such personal jurisdiction.

10. The Employee agrees that: (i) the Employee's employment relationship with the Company is "at-will," which means that either the Employee or the Company can terminate the relationship at any time for any reason or no reason, with or without notice, unless the Employee and the Company are parties to a contract that expressly provides a fixed term of employment, (ii) the Employee's employment relationship with the Company is contingent upon the Employee's execution of this Agreement, which is a material inducement to the Company to offer the employment relationship to the Employee and to provide Proprietary Information to the Employee, and (iii) this Agreement shall survive any termination for any reason whatsoever of the Employee's employment relationship with the Company.

11. The Employee agrees that the Company's failure to insist upon strict compliance with any provision of this Agreement shall not be deemed a waiver of such provision or of any other provision in the Agreement. The provisions of this Agreement shall be enforceable, notwithstanding the existence of any breach of this Agreement by the Company or of any claim by the Employee against the Company, whether predicated on this Agreement or otherwise.

12. This Agreement contains the entire understanding between the parties with respect to the subject matter hereof and supersedes all prior or contemporary agreements or understandings, whether written or oral, with respect thereto, provided, however, prior to the execution of this Agreement, if Company and the Employee were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. This Agreement may not be modified or amended except by an agreement in writing signed by both parties.

13. The Employee agrees that this Agreement is assignable by the Company at the Company's discretion and the Employee authorizes the Company's successors and assigns to enforce this Agreement for their respective benefits.

14. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

15. The Employee agrees that a breach of any provision(s) of this Agreement will toll the running of the limitation period with respect to such provision(s) for as long as such breach occurs.

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16. The Employee agrees and acknowledges that the Company's agreement to employ the Employee, in and of itself, is sufficient and adequate consideration for the Employee's promises and obligations hereunder, and that the compensation and other benefits that the Company provides the Employee during the course of the Employee's employment are, independently and collectively, sufficient and adequate consideration for the Employee's promises and obligations hereunder.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Employee has executed this Agreement to be effective as of the date set forth above.

By: _____ (s)
Name: _____
Title: _____

NAME _____ (s)

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SCHEDULE A

The following items are inventions, ideas, computer software programs or other equipment or technology not covered by Section 4 of this Agreement, which the undersigned conceived of or developed, wholly or in part, prior to the Employee's employment or engagement with the Company and shall be excluded from the scope of this Agreement.

If the undersigned has no such items to disclose, write "NONE" on this line: _____ .

Description of Items: (if applicable)

Title on Document	Date on Document	Name of Witness on Document

LIQUIDIA TECHNOLOGIES, INC.

By: _____

NAME _____

Dated: _____

Dated: _____

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EXECUTIVE EMPLOYMENT AGREEMENT

This EXECUTIVE EMPLOYMENT AGREEMENT (the “**Agreement**”) is entered into on January 22, 2018, by and between Kevin Gordon (the “**Executive**”) and Liquidia Technologies, Inc., a Delaware corporation (the “**Company**”). Each of the Company and Executive is a “**Party**” and, collectively, they are the “**Parties**.”

The Company desires to employ Executive and, in connection with such employment, to compensate Executive for Executive’s personal services to the Company; and

Executive desires to provide personal services to the Company in return for certain compensation.

Accordingly, in consideration of the mutual promises and covenants contained herein, the Parties agree to the following:

1. **EMPLOYMENT BY THE COMPANY.**

1.1 **Effective Date; Start Date; At-Will Employment.** This Agreement is contingent, and shall become effective, on the last to occur of the following: (a) Executive’s satisfactory completion of a background check, (b) Executive’s compliance with the Immigration Reform and Control Act of 1986, and (c) Executive’s execution of this Agreement (the “**Effective Date**”). Subject to the foregoing, Executive’s employment is anticipated to commence on January 22, 2018 (the “**Start Date**”), and Executive shall be employed by the Company on an “at will” basis, meaning either the Company or Executive may terminate Executive’s employment at any time, with or without cause or advance notice, subject to Executive’s right to receive the compensation set forth in Section 6 hereof. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the “at will” nature of Executive’s employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive’s rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 **Position.** Subject to the terms set forth herein, the Company agrees to employ Executive in the position of President and Chief Financial Officer, and Executive hereby accepts such employment. Executive will report to the Chief Executive Officer (“**CEO**”).

1.3 **Duties.** Executive shall faithfully perform all duties of the Company related to the position or positions held by the Executive, including but not limited to all duties set forth in this Agreement and/or in the Bylaws of the Company related to the position or positions held by the Executive and all additional duties that are reasonably prescribed from time to time by the CEO. In addition to the foregoing, Executive shall serve as the Company’s principal accounting officer. Executive shall devote the Executive’s full business time and attention to the performance of the Executive’s duties and responsibilities on behalf of the Company and in furtherance of its best interests. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s corporate headquarters in North Carolina. In

addition, Executive shall make such business trips at the Company’s expense to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 **Company Policies.** The Executive shall comply with all Company written policies, standards, rules and regulations (a “**Company Policy**” or collectively, the “**Company Policies**”) and all applicable government laws, rules and regulations that are now or hereafter in effect. The Executive acknowledges receipt of copies of all written Company Policies that are in effect as of the date of this Agreement. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. **COMPENSATION.**

2.1 **Salary.** Executive shall receive a base salary of \$450,000 on an annualized basis, payable subject to standard federal and state payroll withholding requirements in accordance with the Company’s standard payroll practices (“**Base Salary**”). Executive’s Base Salary may be increased from time to time by the Board of Directors of the Company (the “**Board**”). Notwithstanding anything to the contrary, the Base Salary may be reduced if the Board determines such reduction is necessary and justified by the financial condition of the Company and implements an equal percentage reduction in the base salaries of all of the Company’s executive officers, but in no event will such reduction be greater than ten percent (10%) of the Base Salary. A reduction in Executive’s Base Salary in accordance with the immediately preceding sentence shall not constitute a material diminution in Base Salary as described in Section 6.4(b) of this Agreement.

2.2 **Bonus.** Commencing on January 1, 2018, and for the period Executive is employed with the Company, Executive shall be eligible to earn for Executive’s services to be rendered under this Agreement a discretionary annual cash bonus target equal to 40% of Base Salary (“**Bonus Target**”), subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements. Whether or not Executive earns any bonus will be dependent upon (a) Executive’s continuous performance of services to the Company through the date any bonus is paid, except as set forth in Sections 6.1 and 6.7, and (b) the actual achievement by Executive and the Company of the applicable performance targets and goals set by the Board in advance of, or within the first quarter of, each calendar year. The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. The Board will determine in its reasonable discretion the extent to which Executive and the Company have achieved the performance goals upon which the bonus is based and the amount of the bonus, which could be above or below the Bonus Target (and may be zero). Any bonus shall be subject to the terms of any applicable incentive compensation plan adopted by the Company. Any bonus, if earned, will be paid to Executive within the time period set forth in the incentive compensation plan, or if no such time period was established, within two and one-half months following the end of the year during which the bonus is earned.

2.3 **Equity.** Subject to Board and stockholder approval of a sufficient increase in the number of shares of Common Stock reserved and authorized for issuance under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as may be amended from time to time by the

Company (the “**Plan**”), Executive shall receive the following grants: (i) an option (the “**Option**”) to purchase shares of Common Stock equal to 1% of the Company’s issued and outstanding capital stock determined on an as converted to common stock, fully diluted basis (excluding any shares that have not been granted or are not subject to outstanding awards under the Company’s equity incentive plans, but including all equity issued in the Series D capital round) on the date of grant; and (ii) a number of Restricted Stock Unit Awards (the “**RSU**”) (as defined in the Plan) equal to 1% of the Company’s issued and outstanding capital stock determined on an as converted to common stock, fully diluted basis (excluding any shares that have not been granted or are not subject to outstanding awards under the Company’s equity incentive plans, but including all equity issued in the Series D capital round) on the date of grant. The date of grant for the Option and the RSU shall be on such date as the Board next approves a 409A valuation of the Company’s Common Stock (the “**Valuation**”). The exercise price per share of the Option shall be the fair value (as defined under the terms of the Plan) of such shares as determined by the Valuation. The Company shall use commercially reasonable efforts to complete the Valuation within two weeks following its next equity financing. The Option and the RSU grant shall be subject to the terms of the Plan and the applicable form of grant agreement. To the extent permissible under law, the Option shall be an incentive stock option. Subject to your continued employment through the applicable vesting dates and the terms and conditions of the Plan and the applicable award agreement, the Option and the RSU shall be subject to the following vesting schedule: 25% of the grant will become vested and exercisable or settled, as applicable, on the 12 month anniversary of the Start Date and the balance will become vested and exercisable or settled, as applicable, in equal monthly installments over the following 36 months.

2.4 **Additional Equity Grant.** Upon the earlier of (a) the Company consummating an initial public offering (IPO) of its Common Stock or (b) the Company entering into an equity financing transaction or a series of such transactions up to an aggregate amount of \$20 million (excluding the Company’s Series D round) and subject to your continued employment through such date, you will be awarded on the date of the execution of the underwriting agreement of the IPO or the closing date of such equity financing, an option to purchase additional shares of Common Stock and a number of additional Restricted Stock Units (the “**Additional Equity Grant**”) on a pro rata basis such that your outstanding number of options and Restricted Stock Units (which includes the grants made pursuant to Section 2.3) shall be equal in the aggregate to 2% (1% in options and 1% in Restricted Stock Units) of the Company’s issued and outstanding capital stock determined on an as converted to common stock, fully diluted basis (excluding any shares that have not been granted or are not subject to outstanding awards under the Company’s equity incentive plans) on the date of grant. The Additional Equity Grant shall be subject to the vesting conditions and schedule set forth in Section 2.3, except that the vesting commencement date shall be the date of grant of the Additional Equity Grant. The options issued pursuant to this Section 2.4 shall be nonqualified stock options and shall have an exercise price equal to the price per share in the IPO. The Additional Equity Grant shall be subject to the terms of the then current equity plan adopted by the Company and the applicable form of grant agreement.

2.5 **Benefits.** Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves

the right to change, alter, or terminate any benefit plan in its sole discretion, provided that such changes apply generally to the participants of such plan.

2.6 **Expense Reimbursement.** The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company Policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the "**Code**"): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. **PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS.** As a condition of employment, Executive agrees to execute and abide by a Confidentiality, Inventions and Non-Competition Agreement (the "**Confidential Information Agreement**"), which may be amended by the Parties from time to time without regard to this Agreement. The Confidential Information Agreement contains provisions that are intended by the Parties to survive and do survive termination of this Agreement.

4. **OUTSIDE ACTIVITIES DURING EMPLOYMENT.** Except with the prior written consent of the Company, which shall not be unreasonably withheld, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive's responsibilities and the performance of Executive's duties hereunder, except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties, (iii) reasonable time devoted to service on the board of directors of up to two (2) companies that are not competitive with the Company, and (iv) such other activities as may be specifically approved by the Company. This restriction shall not, however, preclude Executive from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or employment or service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. **NO CONFLICT WITH EXISTING OBLIGATIONS.** Executive represents that Executive's performance of all the terms of this Agreement and as an executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. **TERMINATION OF EMPLOYMENT.** The Parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

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6.1 **Termination by the Company Without Cause.**

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below) by giving thirty (30) days' advance notice as described in Section 7.1 of this Agreement; *provided, however*, that the Company may elect for you to be on leave or to perform modified duties at any time between the date of notice and the date of termination. A termination pursuant to Sections 6.3 and 6.5 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h) a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, then Executive shall also be entitled to receive (collectively, the "**Severance Benefits**");

(i) an amount equal to Executive's then current Base Salary for twelve (12) months (the "**Severance Period**"), less all applicable withholdings and deductions, paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter;

(ii) an amount equal to the bonus that Executive would have earned pursuant to Section 2.2 if Executive had remained employed through the end of the applicable fiscal year in which the termination date occurs, pro-rated based on the number of days that Executive was employed with the Company during the applicable fiscal year, payable on the date that such bonus is paid to the Company's other executives; and

(iii) payment of the employer portion of the premiums required to continue Executive's group health care coverage under the applicable provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("**COBRA**"), provided that Executive timely elects to continue coverage under COBRA, until the earliest of (A) the close of the Severance Period, (B) the expiration of Executive's eligibility for the continuation coverage under COBRA, or (C) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment (such period from the termination date through the earliest of (A), (B) or (C), the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines in its sole discretion that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code or any statute or regulation of similar effect (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings for the remainder of the COBRA Payment Period, regardless of whether Executive elects COBRA coverage (the "**Special Severance Payment**"). Executive may, but is not obligated to, use such Special Severance Payment toward the cost of COBRA

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premiums. If Executive becomes eligible for coverage under another employer's group health plan or otherwise ceases to be eligible for COBRA during the COBRA Payment Period, Executive must immediately notify the Company of such event, and all payments and obligations under this clause will cease.

(c) Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to Section 6.1(b) of this Agreement if: (i) Executive signs and delivers to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form substantially similar to that contained in Exhibit B hereto, as may be amended by the Company to reflect changes in the law (the "**Release**"), by the 60th day following the termination date or such earlier date as set forth in the Release, which cannot be revoked in whole or part (if applicable) by such date or such earlier date as set forth in the Release (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with all post-termination obligations under this Agreement and the Confidential Information Agreement; and (v) Executive materially complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in the Release. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of Severance Benefits will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this Section 6.1 is in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 **Termination by the Company for Cause.**

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 7.1 of this Agreement.

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(b) "**Cause**" for termination shall mean that Executive has engaged in any of the following: (i) any material breach of the terms of this Agreement by Executive, or the willful failure of Executive to diligently and properly perform Executive's material duties for the Company; (ii) Executive's misappropriation or unauthorized use of the Company's tangible or intangible property that causes or is likely to cause material harm to the Company or its reputation, or material breach of the Confidential Information Agreement or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (iii) any material failure to comply with the Company Policies or any other policies and/or directives of the Board; (iv) Executive's use of illegal drugs or any illegal substance, or Executive's use of alcohol in any manner that materially interferes with the performance of the Executive's duties under this Agreement; (v) any dishonest or illegal action (including, without limitation, embezzlement) or any other action, whether or not dishonest or illegal, by Executive which is willful and materially detrimental to the interest and well-being of the Company, including, without limitation, harm to its reputation; (vi) Executive's failure to fully disclose any material conflict of interest the Executive may have with the Company in a transaction between the Company and any third party which is materially detrimental to the interest and well-being of the Company; (vii) any willful adverse action or omission by Executive which would be required to be disclosed pursuant to public securities laws or which would limit the ability of the Company or any entity affiliated with the Company to sell securities under any Federal or state law or which would disqualify the Company or any affiliated entity from any exemption otherwise available to it; or (viii) Executive's material violation of the Company's Policies prohibiting unlawful harassment, discrimination, retaliation, or workplace violence; *provided, however*, that prior to any termination of Executive for "Cause," if the grounds for such Cause are reasonably capable of cure by Executive, the Company shall provide Executive with written notice of the grounds for Cause and provide Executive with thirty (30) business days in which to cure such Cause. Provided further that no act or failure to act on Executive's part shall be considered "willful" unless the Board determines it was done, or was omitted to be done, by Executive in bad faith or in a manner that Executive could not have reasonably believed to be in the best interest of the Company.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.3 **Resignation by Executive.**

(a) Executive may resign from Executive's employment with the Company at any time by giving thirty (30) days' advance notice as described in Section 7.1, *provided that* the Company may set a termination date at any time between the date of notice and the date of resignation, in which case Executive's resignation shall be effective as of such other date. Executive will receive compensation through any required notice period.

(b) In the event Executive resigns from Executive's employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance Benefits or any other severance compensation or

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benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.4 **Resignation by Executive for Good Reason.**

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior consent: (i) a material diminution in Executive's authority, duties or responsibilities; (ii) a material diminution in Executive's Base Salary or Bonus Target; (iii) a requirement that Executive report to an employee other than the CEO; (iv) the Company materially breaches its obligations under this Agreement; or (v) Executive's principal place of employment is relocated by more than fifty (50) miles from the Company's present location in Research Triangle Park, North Carolina. In addition to any requirements set forth above, in order for any of the above events to constitute "Good Reason," Executive must (X) inform the Company of the existence of the event within sixty (60) days of the initial existence of the event, after which date the Company shall have no less than thirty (30) days to cure the event which otherwise would constitute "Good Reason" hereunder, and (Y) Executive must terminate his employment with the Company for such "Good Reason" no later than ninety (90) days after the initial existence of the event which prompted the Executive's termination. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.1(c) above, Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1 and on the same terms and conditions set forth in Section 6.1(c) and Section 6.1(e) as if Executive had been terminated by the Company without Cause.

(d) Any damages caused by the termination of Executive's employment for Good Reason would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.5 **Termination by Virtue of Death, Disability of Executive, or Discontinuation of Business.**

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on

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"**Disability**" shall mean termination because a qualified medical doctor mutually acceptable to the Company and Executive or Executive's personal representative has certified in writing that: (A) Executive is unable, because of a medically determinable physical or mental disability, to perform the essential functions of Executive's job, with or without a reasonable accommodation, for more than one hundred and eighty (180) calendar days measured from the last full day of work; or (B) by reason of mental or physical disability, it is unlikely that Executive will be able, within one hundred and eighty (180) calendar days, to resume the essential functions of Executive's job, with or without a reasonable accommodation, and to otherwise discharge the Executive's duties under this Agreement. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

(c) In the event the Company's business is discontinued because rendered impracticable by substantial financial losses, lack of funding, legal decisions, administrative rulings, declaration of war, dissolution, national or local economic depression or crisis or any reasons beyond the control of the Company, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive or his legal representative all Accrued Obligations.

6.6 **Cooperation With Company After Termination of Employment.** Following termination of Executive's employment for any reason and for a period one (1) year thereafter, Executive agrees to cooperate reasonably (a) with the Company in (i) the defense of any legal matter involving any matter that arose during Executive's employment with the Company, and (ii) all matters relating to the winding up of Executive's pending work and the orderly transfer of any such pending work to such other employees as may be designated by the Company; and (b) with all government authorities on matters pertaining to any investigation, litigation or administrative proceeding pertaining to the Company. The Company will reimburse Executive for any reasonable travel and out of pocket expenses incurred by Executive in providing such cooperation.

6.7 **Change in Control Benefits.** In the event the Company (or any surviving or acquiring corporation) terminates Executive's employment without Cause or Executive resigns for Good Reason within twelve (12) months following the effective date of a Change in Control (as defined under the Plan), then Executive shall be entitled to the Accrued Obligations and, provided

that Executive complies with the obligations in Section 6.1(c) of this Agreement (including the requirement to provide an effective Release) the following: (a) Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1(b) and on the same conditions as if Executive had been terminated by the Company without Cause, except that Executive's bonus in Section 6.1(b)(ii) shall be payable at the Bonus Target; and (b) in the event that Executive's outstanding equity as of the closing of the Change in Control is assumed or continued (and retained in accordance with its terms) by the surviving entity in a Change in Control, then 100% of the unvested portion of such equity shall become vested.

6.8 Application of Section 409A.

(a) It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms.

(b) The preceding provisions shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. In the event that the terms of this Agreement would subject Executive to any additional tax, penalty or interest under Section 409A (the "**409A Penalties**"), the Company and Executive shall cooperate in good faith to amend the terms of this Agreement to avoid such 409A Penalties, if possible. The Company shall not be liable to Executive for any payment made under this Agreement which is determined to result in an additional tax, penalty or interest under Section 409A, nor for reporting in good faith any payment as an amount includible in gross income under Section 409A.

(c) No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

(d) For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment.

(e) If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance Benefits will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (1) pay to Executive a lump sum amount equal to the sum of the Severance Benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the Severance Benefits had not been delayed pursuant to this Section 6.8, and (2) commence paying the balance of the Severance Benefits in accordance with the applicable payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.8.

6.9 Parachute Payments.

(a) Notwithstanding any other provisions of this Agreement to the contrary, in the event that it shall be determined that any payment or distribution to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (a "**Payment**") would be nondeductible by the Company for Federal income tax purposes because of Section 280G of the Code, the Company shall reduce the aggregate present value of the Payments under this Agreement to the Reduced Amount (as defined below) if, and only if, reducing the Payments under this Agreement will provide Executive with a greater net after-tax amount than would be the case if no such reduction was made, taking into account the applicable federal, state, local and foreign income, employment and other taxes, including the excise tax imposed by Section 4999 of the Code. If a reduction in the Payments is necessary, such reduction shall occur in the following order: (1) reduction of cash payments; (2) cancellation of accelerated vesting of equity awards other than stock options; (3) cancellation of accelerated vesting of stock options; and (4) reduction of other benefits paid to Executive. Within any such category of payments and benefits (that is, clauses (1), (2), (3) or (4) of this Section 6.9(a)), a reduction shall occur first with respect to amounts that are not "deferred compensation" within the meaning of Section 409A of the Code and then with respect to amounts that are. The "**Reduced Amount**" shall be an amount expressed in present value that maximizes the aggregate present value of Payments under this Agreement without causing any Payment to be nondeductible by the Company because of Section 280G of the Code.

(b) All determinations to be made under this Section 6.9 shall be made at the Company's expense by a firm of certified public accountants of national standing selected by the Company (the "**Accounting Firm**") which may be the firm regularly auditing the financial statements of the Company. The Company and Executive shall furnish to the Accounting Firm such information and documents as the Accounting Firm may reasonably require in order to make a determination under this Section. To the extent requested by Executive, the Company shall cooperate with Executive in good faith in valuing, and the Accounting Firm shall value, services to be provided by Executive (including refraining from performing services pursuant to a covenant not to compete) before, on or after the date of the transaction which cause the application of Section 280G of the Code such that payments in respect of such services may be considered to be "reasonable compensation" within the meaning of the regulations under Section 280G of the Code. In making its determinations hereunder, the Accounting Firm shall apply reasonable, good faith interpretations regarding the applicability of Section 280G and Section 4999, along with any other applicable portions of the Code or other tax laws. The Accounting Firm shall make all determinations required to be made under this Section and shall provide detailed supporting calculations to the Company and Executive within 30 days after the Termination Date or such earlier time as is requested by the Company, and provide an opinion to Executive that he or she has substantial authority not to report any excise tax on his or her Federal income tax return with respect to any Payments. Any such determination by the Accounting Firm shall be binding upon the Company and Executive. Subject to Sections 6.1(c) and 6.9, within five business days thereafter, the Company shall pay to or distribute to or for the benefit of Executive such amounts as are then due to Executive under this Agreement.

(c) As a result of the uncertainty in the application of Section 280G of the Code at the time of the initial determination by the Accounting Firm or the Company hereunder, it is possible that Payments, as the case may be, will have been made by the Company which should not have been made ("**Overpayment**") or that additional Payments, as the case may be,

which will not have been made by the Company could have been made ("**Underpayment**"), in each case, consistent with the calculations required to be made hereunder. In the event that the Accounting Firm, based upon the assertion of a deficiency by the Internal Revenue Service against Executive which the Accounting Firm believes has a high probability of success determines that an Overpayment has been made, promptly on notice and demand Executive shall repay to the Company any such Overpayment paid or distributed by the Company to or for the benefit of Executive together with interest at the applicable Federal rate provided for in Section 7872(f)(2)(A) of the Code; provided, however, that no such amount shall be payable by Executive to the Company if and to the extent such payment would not either reduce the amount on which Executive is subject to tax under Section 1 and Section 4999 of the Code or generate a refund of such taxes. In the event that the Accounting Firm, based upon controlling precedent or other substantial authority, determines that an Underpayment has occurred, any such Underpayment shall be promptly paid by the Company to or for the benefit of Executive together with interest at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code.

7. GENERAL PROVISIONS.

7.1 **Notices.** Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the Party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 **Severability.** Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 **Survival.** Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the Parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

7.4 **Waiver.** If either Party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 **Complete Agreement.** This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter

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and supersedes any prior oral discussions or written communications and agreements. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The Parties have entered into a separate Confidential Information Agreement and have entered or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the Parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the Parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 **Headings.** The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 **Successors and Assigns.** The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a Party, but may not otherwise assign this Agreement or its rights and obligations hereunder. The Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Executive's estate upon death.

7.8 **Withholding.** All amounts payable hereunder shall be subject to applicable tax withholding.

7.9 **Choice of Law.** This Agreement in all respects shall be governed by and interpreted in accordance with the laws of the State of North Carolina, both procedural and substantive, without regard to conflicts of law, except to the extent that federal laws and regulations preempt otherwise applicable law.

7.10 **Mandatory Mediation.** Prior to and as a condition of either Party's filing suit in state or federal court, the Parties shall engage in a mediated settlement conference in accordance with the North Carolina Superior Court Rules Implementing Statewide Mediation. The Parties shall mediate in good faith until settlement is reached or an impasse is declared by the mediator.

7.11 **Jurisdiction.** Each Party hereby irrevocably submits to the exclusive jurisdiction of the United States District Court located in Wake County, North Carolina, or any state court located within such state, in respect of any claim relating to this Agreement or Executive's employment with the Company, and hereby waives, and agrees not to assert, as a defense in any action, suit or proceeding in which any such claim is made that said Party is not subject thereto or that such action, suit or proceeding may not be brought or is not maintainable in such courts or that the venue thereof may not be appropriate or that this Agreement may not be enforced in or by such courts. Any appellate proceedings shall take place in the appropriate courts having appellate jurisdiction over the courts set forth in this Section.

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7.12 **Counterparts.** This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one Party, but all of which taken together will constitute one and the same Agreement. Facsimile signatures and signatures transmitted by PDF shall be equivalent to original signatures.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

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IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first written above.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Neal F. Fowler
Name: Neal F. Fowler
Title: CEO

Executive:

/s/ Kevin K. Gordon
Kevin K. Gordon

Exhibit A

CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

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CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

THIS CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT (this "Agreement") is effective as of DATE (the "Effective Date") by and between NAME (hereinafter "Employee") and Liquidia Technologies, Inc. (the "Company").

STATEMENT OF PURPOSE

The Employee desires to be employed by the Company, and the Company is willing to employ Employee strictly subject to Employee's agreement to be bound by the terms of this Agreement.

IN CONSIDERATION of the Company's employment of the Employee and the compensation and other benefits that the Company may provide to Employee as an employee, the Employee, intending to be legally bound, agrees to the following:

1. For purposes of this Agreement, "**Proprietary Information**" is information (whether in written or other form or whether or not patentable or protectable by copyright, trade secret, trade dress, trademark, or the like) that: (i) has been created, invented, discovered, or developed by the Employee in connection with the Employee's employment by the Company; (ii) is non-public and has been disclosed, furnished, or communicated to the Employee in connection with the Employee's employment by the Company; or (iii) is non-public and the unauthorized disclosure of which could be detrimental to the interests of the Company. Proprietary Information includes, but is not limited to, all inventions, works of authorship, trade secrets, know how, proprietary or confidential information, including, but not limited to, research, product or business plans, products, services, projects, proposals, processes, formulas, ideas, data, compositions, technology, computer programs and related source code and object code, developments, designs, drawings, marketing information and plans, customer lists, budgets, projections, partners, cost analyses, acquisition candidates, relevant parts of analysis, reviews, compilations, studies or other records and documents, and other information owned by the Company, disclosed to the Employee, or to which the Employee has been provided access or gains access, either directly or indirectly, by any means. Proprietary Information does not include information that is or becomes generally available to the public other than as a result of a disclosure by the Employee or by any other person or entity that is under a confidentiality obligation to Company with respect to such information.

2. Nondisclosure of Proprietary Information.

2.1 The Employee acknowledges and agrees that Proprietary Information is the sole property of the Company or its designee and that the Employee shall have no right,

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title, license, or interest in or to any Proprietary Information. During and after the Employee's employment by the Company, the Employee shall keep in the strictest confidence and trust all Proprietary Information and shall not directly or indirectly disclose, distribute, copy, supply, or use, in whole or in part, any Proprietary Information except as approved in advance in writing by the Company. Notwithstanding the foregoing, it is understood that, at all such times, the Employee is free (i) to use information which was known to the Employee prior to employment with the Company or which is generally known in the trade or industry through no breach of this Agreement or other act or omission by the Employee, (ii) to discuss the terms of the Employee's employment, wages and working conditions to the extent expressly protected by applicable law, (iii) to report possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, (iv) to respond to inquiries from, or otherwise cooperate with, any governmental or regulatory investigation, or (v) to testify truthfully as compelled by lawful process or subpoena related to such testimony after the Employee has provided advance written notice of said subpoena to the Company's Chief Executive Officer and reasonably cooperates with the Company in any process to oppose said subpoena.

2.2 The Employee shall not use or disclose to the Company, or assist in the disclosure to the Company of, proprietary or confidential information belonging to any third parties, including any prior employer(s).

2.3 The Employee acknowledges and agrees that the Company has received and in the future may receive from third parties, including, but not limited to, potential collaborating partners or customers of the Company, confidential or proprietary information ("**Third Party Information**") 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. During the term of the Employee's employment with the Company and thereafter, the Employee will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than Company personnel or the Company's designee who need to know such information in connection with their work for the Company or such third party) or use Third Party Information, except in connection with the Employee's work for the Company or such third party, unless expressly approved in advance in writing by the Company. The Employee further agrees to be bound by and subject to any confidentiality or nondisclosure agreements or clauses with respect to such Third Party Information between the Company and any such third party.

2.4 Pursuant to the Defend Trade Secrets Act of 2016, the Employee acknowledges that the Employee will not have criminal or civil liability under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (a) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney and (b) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if the Employee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Employee may

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disclose the trade secret to the Employee's attorney and may use the trade secret information in the court proceeding, if the Employee (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

3. Upon the earliest to occur of (i) termination of the Employee's employment by the Company for any reason, (ii) termination of the Employee's access to Proprietary Information, or (iii) the request of the Company, the Employee shall return to the Company (and will not keep in Employee's possession or control or deliver to anyone else) all materials belonging to the Company, whether kept at the Employee's business office, personal residence or otherwise, including, but not limited to, all materials containing or relating to any Proprietary Information in any written, tangible, electronic or other form that the Employee may have in Employee's possession or control, and any and all mobile telephones, personal digital assistants, pagers, computer and other electronic devices and credit cards. After returning the materials and equipment described in the preceding sentence to the Company, the Employee shall not retain any copies of any such materials.

4. Ownership of Proprietary Information.

4.1 All Proprietary Information and other information, which by its nature is proprietary to the Company, relating to the Company's business or the Company's anticipated business, or based on, derived from or relating to any Proprietary Information (collectively, Proprietary Information and "**Work Product**") shall be the sole property of the Company. The Employee agrees that all Proprietary Information and Work Product created, conceived, reduced to practice, made or otherwise developed by the Employee, solely or jointly, during and in any way related to the Employee's employment, shall be the exclusive property of the Company and/or its designees or assignees, and shall be deemed "works made for hire," as that term is defined in Section 101 of the U.S. Copyright Act of 1976, as amended.

4.2 If, for any reason, any Proprietary Information and Work Product does not qualify as works made for hire, the Employee shall assign and does hereby irrevocably, unconditionally, and without encumbrance of any kind assign to the Company, and forever waives and agrees never to assert, all right, title, and interest, including without limitation, all patent, trademark, copyright, trade secret, and other intellectual property (collectively, "**Intellectual Property**") rights, in and to such Proprietary Information and Work Product. The Employee shall assist the Company, or its designee, in every proper way to secure the Company's rights in the Proprietary Information and Work Product and any Intellectual Property rights relating thereto in any and all countries, including (i) the disclosure to the Company of all pertinent information and data with respect thereto, (ii) the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company or its designee the sole and exclusive right, title and interest in and to the Proprietary Information and Work Product, and (iii) the defense of any claim, demand, action, litigation, suit, or other proceeding,

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including, but not limited to, interference, cancellation, opposition, or other proceedings in respect of such applications or any registrations or patents issuing therefrom. The Employee shall continue such assistance after the termination of the Employee's employment by the Company.

4.3 During the Employee's employment by the Company, the Employee shall report promptly to the Company all Proprietary Information and Work Product created, conceived, reduced to practice, or otherwise developed by the Employee, solely or jointly.

4.4 If the Company is unable because of the Employee's mental or physical incapacity or for any other reason to secure the Employee's signature to apply for or to secure protection of any Proprietary Information and Work Product, then the Employee hereby designates and appoints the Company and its duly authorized officers and agents as its agents and attorneys-in-fact to execute and file any certificates, applications or documents and to do all of their lawful acts necessary to perfect and protect the Company's rights in the Proprietary Information and Work

Product. The Employee expressly acknowledges that the foregoing power of attorney is coupled with an interest and is therefore irrevocable and shall survive the Employee's death or incompetency and the termination of the Employee's employment or engagement by the Company.

4.5 The Employee hereby represents and warrants that the Employee has fully disclosed to the Company on Schedule A attached hereto any idea, invention, discovery or process relating to the Company's business which, prior to the Employee's employment with the Company, the Employee conceived, reduced to practice, or developed, individually or jointly, and is to be excluded from the scope of this Agreement.

4.6 Notwithstanding anything in this Agreement to the contrary, the obligation of the Employee to assign or offer to assign the Employee's rights in an invention to the Company shall not extend or apply to an invention that the undersigned developed (i) entirely on the Employee's own time; (ii) without using Company equipment, supplies, facilities, or other resources, Proprietary Information or trade secret information unless such invention (a) relates to the Company's business or actual or demonstrably anticipated research or development, or (b) results from any work performed by the Employee for the Company. The Employee shall bear the burden of proof in establishing that the Employee's invention qualifies for exclusion under this Section 4.6.

5. Covenant Not To Compete.

5.1 For purposes of Part 5 of this Agreement, including each of its subparts, the following terms shall have the following meanings:

a. "**Competing Business**" shall mean any corporation, partnership, person, or other entity that is researching, developing, manufacturing, marketing, distributing, or selling any product, service, or technology that is competitive with any part of the Company's Business.

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b. The "**Company's Business**" shall mean the development, manufacture, marketing, distribution, or sale of, including research directed to, any product, service, or technology that the Company is developing, manufacturing, marketing, distributing, or selling or to which the Company directed research at any time during Employee's employment with the Company. As of the date of this Agreement, the Company's Business includes, but is not limited to, research directed to and the development, manufacture, marketing, distribution, and/or sale of: (i) isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold; (ii) size and/or shape controllable pharmaceutical or therapeutic particles molded using a polymer or low surface energy mold; (iii) film based products of or containing arrays of size and/or shape controlled structures molded from a low surface energy mold; (iv) isolated nano or micro size and/or shape controlled particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled particles fabricated from a mold; (v) nano or micro size and/or shape controllable particles molded using a polymer or low surface energy mold; or (vi) patterned drum fabrication and mold for manufacturing the products of (i)-(v) above. The Employee understands that during the Employee's employment with the Company, the Company's Business may expand or change, and the Employee agrees that any such expansions or changes shall expand or contract the definition of the Company's Business and the Employee's obligations under this Agreement accordingly.

c. "**Territory**" shall mean the following severable geographic areas: (i) the world, (ii) any country in which the Company or a Competing Business is engaged in business, (iii) any country in which the Company is engaged in business, (iv) the United States, Europe, and Asia, (v) the United States, (vi) any state, including the District of Columbia, in which the Company or a Competing Business is engaged in business, (vii) any state, including the District of Columbia, in which the Company is engaged in business, (viii) North Carolina, (ix) a one hundred mile radius of the Employee's principal place of employment or work for the Company, or (x) a one hundred mile radius of the Company's corporate headquarters.

5.2 It is recognized and understood by the Employee that, through the Employee's association with the Company, the Employee shall: (i) have access to trade secrets and confidential information of the Company, including, but not limited to, valuable information about its intellectual property, business operations and methods, and the persons with which it does business in various locations throughout the world, that is not generally known to or readily ascertainable by the Company's competitors, (ii) develop relationships with the Company's customers and others with which the Company does business, and these relationships are among the Company's most important assets, (iii) receive specialized knowledge of and specialized training in the Company's Business, and (iv) gain such knowledge of the Company's Business that, during the course of the Employee's employment with the Company and for a period of one year following the termination thereof, the Employee could not perform services for a Competing Business

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without inevitably disclosing the Company's trade secrets and Proprietary Information to that Competing Business.

5.3 While employed by the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise) for any Competing Business, (ii) engage in any activities (or assist others to engage in any activities) that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing or prospective customers, suppliers, business partners, or contractors of the Company to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, or (v) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company.

5.4 For a period of one year following the termination of the Employee's employment with the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise), within the Territory for any Competing Business, that are the same or substantially similar to any services that the Employee performed for the Company or that otherwise utilize skills, knowledge, and/or business contacts and/or relationships that the Employee developed while providing services to the Company, (ii) engage in any activities (or assist others to engage in any activities) within the Territory that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or any prospective customer to whom the Company has made a written proposal ("Prospective Customers"), suppliers, business partners, or contractors of the Company, during the last year of the Employee's employment with the Company, to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, (v) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or Prospective Customers, suppliers, business partners, or contractors of the Company with which the Employee worked or had business contact during the last year of the Employee's employment with the Company to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, or (vi) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company. Where a Competing Business is a large enterprise with separately operated business units, the restrictions in Section 5.4(i) shall not apply to any such business unit that has no involvement in the research, development, manufacture, marketing, distribution, or sale of a product, service, or technology that is competitive with any part of the Company's Business; *provided, however*, that this sentence does not apply to any employees in a scientific role or whose role involves the research, development or maintenance of the Company's trade secrets. These obligations will continue for the specified period regardless of whether the termination of the Employee's

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employment was voluntary or involuntary or with or without cause, and the specified period shall be tolled and shall not run during any time in which the Employee fails to abide by this obligations.

5.5 The Employee shall not at any time following the termination of the Employee's employment with the Company use the name or trading style of the Company in any country, or use in any country any name or trading style which is the same as or similar to any of the trade or service marks of the Company or any brand name or proposed brand name of any of the Company's products or proposed products, or represent himself or herself as carrying on or continuing or being connected with the Company or its business for any purpose whatsoever unless otherwise agreed by the Company in writing.

5.6 While employed by the Company, the Employee shall disclose to the audit committee of the Company the Employee's interest in respect of any contract or arrangement in which the Employee has any personal material interest, directly or indirectly, or any conflicts of interest (including the conflict of interest that may arise from the Employee's directorship(s) or executive position or personal investments in any corporation(s)) that may involve the Employee. Upon such disclosure, the Employee shall abstain from voting in respect of any such contract, arrangement, proposal, transaction, or matter in which the conflict of interest arises, unless and until the audit committee has determined that no such conflict of interest exists.

5.7 As an exception to the restrictions set forth in Parts 5.3 and 5.4 herein, the Employee may own passive investments in a Competing Businesses, (including, but not limited to, indirect investments through mutual funds), provided that the securities of the Competing Business are publicly traded and the Employee does not own or control more than two percent of the

outstanding voting rights or equity of the Competing Business.

5.8 In the event that a court determines that the length of time, the geographic area, or the activities prohibited under this Agreement are too restrictive to be enforceable, the Court may reduce the scope of the restriction to the extent necessary to make the restriction enforceable.

5.9 The market for the Company's services and the Company's Business is highly specialized and highly competitive such that other companies and business entities compete with the Company in various locations throughout the world. The provisions set forth in this Agreement: (i) are reasonably necessary to protect the Company's legitimate business interests, (ii) are reasonable as to the time, territory, and scope of activities that are restricted, (iii) do not interfere with the Employee's ability to earn a comparable living or secure employment in the field of the Employee's choice, (iv) do not interfere and are not inconsistent with public policy or the public interest, and (v) are described with sufficient accuracy and definiteness to enable the Employee to understand the scope of the restrictions on the Employee.

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5.10 Because of the unique nature of the Proprietary Information, the Employee understands and agrees that the Company will suffer irreparable harm in the event that the Employee fails to comply with any of the Employee's obligations under this Agreement and that monetary damages will be inadequate to compensate the Company for such breach. Accordingly, the Employee agrees that the Company will, in addition to any other remedies available to it at law or in equity, be entitled to injunctive relief to enforce the terms of this Agreement.

6. The Employee hereby authorizes the Company to provide a copy of this Agreement, including any exhibits hereto, to any and all of the Employee's future employers and to notify any and all such future employers that the Company intends to exercise its legal rights arising out of or in connection with this Agreement and/or any breach or any inducement of a breach hereof.

7. The Employee agrees that, during the term of the Employee's employment with the Company, the Employee will not: (i) engage in any other employment, occupation, consulting, or other business activity that conflicts with the Employee's obligations to the Company, or (ii) engage in any other activities that conflict with the Employee's obligations to the Company.

8. Debarment Certification

8.1 The Employee represents and promises that Employee:

- (a) is not presently, and during the Employee's employment will not be, debarred or convicted for a crime for which Employee can be debarred under the Generic Drug Enforcement Act of 1992 (21USC335a)(the "Act"); and
- (b) is not presently, and during the Employee's employment will not be, indicted or otherwise criminally or civilly charged by a government entity (Federal or State) with commission of the kinds of conduct for which Employee can be debarred under the Act; and
- (c) will not employ or otherwise engage any individual who has been (i) debarred or (ii) convicted of a crime for which a person can be debarred under the Act, in any capacity in connection with the activities of developing or reporting data which may become part of an application for approval of a drug or biologic.

8.2 The Employee promises that, during the Employee's employment with the Company, the Employee will promptly notify the Company upon learning of or having a belief that the Employee cannot satisfy the obligations of Section 8.1 above.

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9. The Employee agrees that this Agreement shall be enforced, construed and interpreted under the law of the state of North Carolina, without regard to the conflicts of laws principles thereof. The state and federal courts in North Carolina shall be the exclusive venues for the adjudication of all disputes arising out of this Agreement, and the Employee consents to the exercise of personal jurisdiction over the Employee in any such adjudication and hereby waives any and all objections and defenses to the exercise of such personal jurisdiction.

10. The Employee agrees that: (i) the Employee's employment relationship with the Company is "at-will," which means that either the Employee or the Company can terminate the relationship at any time for any reason or no reason, with or without notice, unless the Employee and the Company are parties to a contract that expressly provides a fixed term of employment, (ii) the Employee's employment relationship with the Company is contingent upon the Employee's execution of this Agreement, which is a material inducement to the Company to offer the employment relationship to the Employee and to provide Proprietary Information to the Employee, and (iii) this Agreement shall survive any termination for any reason whatsoever of the Employee's employment relationship with the Company.

11. The Employee agrees that the Company's failure to insist upon strict compliance with any provision of this Agreement shall not be deemed a waiver of such provision or of any other provision in the Agreement. The provisions of this Agreement shall be enforceable, notwithstanding the existence of any breach of this Agreement by the Company or of any claim by the Employee against the Company, whether predicated on this Agreement or otherwise.

12. This Agreement contains the entire understanding between the parties with respect to the subject matter hereof and supersedes all prior or contemporary agreements or understandings, whether written or oral, with respect thereto, provided, however, prior to the execution of this Agreement, if Company and the Employee were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. This Agreement may not be modified or amended except by an agreement in writing signed by both parties.

13. The Employee agrees that this Agreement is assignable by the Company at the Company's discretion and the Employee authorizes the Company's successors and assigns to enforce this Agreement for their respective benefits.

14. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

15. The Employee agrees that a breach of any provision(s) of this Agreement will toll the running of the limitation period with respect to such provision(s) for as long as such breach occurs.

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16. The Employee agrees and acknowledges that the Company's agreement to employ the Employee, in and of itself, is sufficient and adequate consideration for the Employee's promises and obligations hereunder, and that the compensation and other benefits that the Company provides the Employee during the course of the Employee's employment are, independently and collectively, sufficient and adequate consideration for the Employee's promises and obligations hereunder.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Employee has executed this Agreement to be effective as of the date set forth above.

LIQUIDIA TECHNOLOGIES, INC.

By: _____ (s)
Name:
Title:

_____ (s)

SCHEDULE A

The following items are inventions, ideas, computer software programs or other equipment or technology not covered by Section 4 of this Agreement, which the undersigned conceived of or developed, wholly or in part, prior to the Employee's employment or engagement with the Company and shall be excluded from the scope of this Agreement.

If the undersigned has no such items to disclose, write "NONE" on this line:

Description of Items: (if applicable)

Table with 3 columns: Title on Document, Date on Document, Name of Witness on Document

LIQUIDIA TECHNOLOGIES, INC.

By: _____

NAME _____

Dated: _____

Dated: _____

Exhibit B

SEVERANCE AGREEMENT AND GENERAL RELEASE



SEVERANCE AGREEMENT AND GENERAL RELEASE

This SEVERANCE AGREEMENT AND GENERAL RELEASE ("Agreement") is made and entered into by Liquidia Technologies, Inc., (the "Company") and NAME ("Employee").

Employee has entered into an Executive Employment Agreement with the Company dated DATE (the "Employment Agreement"). Employee's employment by the Company will terminate pursuant to Section NUMBER of the Employment Agreement, effective DATE.

Employee represents that Employee has carefully read the entire Agreement, understands its consequences, and voluntarily enters into it.

In consideration of the above and the mutual promises and good and valuable consideration set forth below, the sufficiency of which is acknowledged by the Parties, Employee and the Company agree as follows:

1. SEPARATION Employee's employment by the Company will terminate, effective DATE ("Termination Date"). The Company will pay Accrued Obligations (as defined in the Employment Agreement) owed to Employee (less any applicable taxes and withholdings) through the Termination Date and will continue to pay wages to Employee at that same rate through DATE.

2. SEVERANCE BENEFITS. Pursuant to Section NUMBER of the Employment Agreement, if Employee signs and does not revoke this Agreement and complies with its terms, the Company will provide to Employee the following "Severance Benefits:"

DESCRIBE SEVERANCE

The Severance Benefits afforded under this Agreement exceed what Employee otherwise is entitled to receive and are in lieu of any other severance compensation or severance benefits to which Employee otherwise might be entitled, and payment of these Severance Benefits is conditioned upon Employee's material compliance with the terms of this Agreement.

3. RELEASE. In consideration of the benefits conferred by this Agreement, EMPLOYEE (ON BEHALF OF EMPLOYEE AND EMPLOYEE'S ASSIGNS, HEIRS, AND OTHER REPRESENTATIVES) RELEASES THE COMPANY, ITS PREDECESSORS, SUCCESSORS, AND ASSIGNS AND ITS AND/OR THEIR PAST, PRESENT, AND FUTURE OWNERS, PARENTS, SUBSIDIARIES, AFFILIATES, PREDECESSORS, SUCCESSORS, ASSIGNS, DIRECTORS, EMPLOYEES, EMPLOYEE BENEFIT PLANS (TOGETHER WITH ALL PLAN ADMINISTRATORS, TRUSTEES, FIDUCIARIES, AND INSURERS), AND AGENTS ("RELEASEES") FROM ALL CLAIMS AND WAIVES ALL RIGHTS, KNOWN OR UNKNOWN, EMPLOYEE MAY HAVE OR CLAIM TO HAVE RELATING TO EMPLOYEE'S EMPLOYMENT WITH THE COMPANY, ITS PREDECESSORS, SUBSIDIARIES, OR AFFILIATES OR EMPLOYEE'S SEPARATION THEREFROM, arising before the execution of this Agreement, including, but not limited to, claims: (i) for discrimination, harassment, retaliation, or accommodation arising under federal, state, or local laws prohibiting age, sex, national origin, race, religion, disability, veteran status, genetic information, or other protected class discrimination, harassment, or retaliation for protected activity (including, but not limited to, claims under the Age Discrimination in Employment Act of 1967 (ADEA), as amended); (ii) for compensation and benefits (including, but not limited to, claims under the Employee Retirement Income Security Act of 1974 (ERISA), as amended, the Fair Labor Standards Act of 1938 (FLSA), as amended, the Family and Medical Leave Act of 1993 (FMLA), as amended, and similar federal, state, and local laws); (iii) arising under federal, state, or local law of any nature whatsoever (including, but not limited to, constitutional, statutory, tort, express or implied contract, or other common law); (iv) for attorneys' fees; and (v) of any kind whatsoever (with the exception of those listed below) whether or not Employee knows about them at the time Employee signs this Agreement. The release of claims set forth in this paragraph does not apply to: (i) claims for workers' compensation benefits or unemployment benefits filed with the applicable state agencies; (ii) vested or accrued employee benefits under any of

the Company's health, welfare or retirement benefit plans; (iii) any earned but unpaid incentive compensation pursuant to the terms of any such plan in which Employee is a participant; and (iv) any rights Employee may have as an insured under any insurance policy purchased or secured by the Company, including without limitation, any directors or officers liability insurance.

4. **COVENANT NOT TO SUE.** Employee will not sue Releasees on any matters relating to Employee's employment arising before the execution of this Agreement or join as a party with others who may sue Releasees on any such claims; provided, however, this paragraph will not: (i) bar claims for workers' compensation or unemployment benefits referenced in Paragraph 3 above, (ii) bar a challenge under the Older Workers Benefit Protection Act of 1990 (OWBPA) to the enforceability of the waiver

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and release of ADEA claims set forth in this Agreement, or (iii) apply when prohibited by law, including as set forth in Paragraph 5 below. If Employee does not abide by this paragraph, then Employee will indemnify Releasees for all expenses that they incur in defending the action.

5. **AGENCY CHARGES/INVESTIGATIONS.** Nothing in this Agreement shall prohibit Employee from filing a charge or participating in an investigation or proceeding conducted by the U.S. Equal Employment Opportunity Commission or other governmental agency concerning the terms, conditions, and privileges of Employee's employment; provided, however, that by signing this Agreement, Employee waives Employee's right to, and shall not seek or accept, any monetary or other relief of any nature whatsoever in connection with any such charges, investigations, or proceedings, to the extent permitted by applicable law. In addition, nothing in this Agreement prevents Employee from reporting to, cooperating with, communicating with, or participating in any proceeding before the Securities and Exchange Commission or from taking any action protected under the whistleblower provisions of any federal securities law, none of which activities shall constitute a breach of the release, non-disparagement or confidentiality clauses of this Agreement.

6. **COMPANY INFORMATION AND PROPERTY.** Nothing in this Agreement shall relieve Employee from any confidentiality, proprietary information, secrecy, non-compete, non-disclosure, non-solicitation, invention rights and assignment obligations, or other such related obligations under any previously executed agreements with the Company. Without limiting the foregoing, Employee agrees that Employee will continue to be bound by the terms and conditions contained in the Confidentiality, Inventions and Non-Competition Agreement between Employee and the Company dated DATE (the "Confidentiality Agreement"), including any amendments thereto, and the terms of the Confidentiality Agreement are in full force and effect and survive Employee's termination of employment with the Company.

7. **RIGHT TO REVIEW AND REVOKE.** The Company delivered this Agreement to Employee on DATE and desires that Employee have adequate time and opportunity to review and understand the consequences of entering into it. Accordingly, the Company advises Employee to consult with an attorney prior to executing it, that Employee has twenty-one days within which to consider it, and that Employee may not execute it before the Termination Date. In the event that Employee does not return an executed copy of the Agreement to the Company within 21 calendar days of receiving it, the Agreement and the obligations of the Company herein shall become null and void. Employee may revoke the Agreement during the seven-day period immediately following Employee's execution of this Agreement. The Agreement will not become effective or enforceable until this revocation period has expired. To revoke the Agreement, a written notice of revocation must be delivered to the Company to the attention of Florina Gordon (florina.gordon@liquidia.com) during the seven-day period immediately following Employee's execution of this Agreement.

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8. **CONFIDENTIALITY AND NONDISPARAGEMENT.** The terms and provisions of this Agreement are confidential, and Employee represents and warrants that since receiving this Agreement, Employee has not disclosed, and going forward will not disclose, the terms and provisions of this Agreement to third parties, except as required by law. Notwithstanding the above, Employee may reveal the terms and provisions of this Agreement to members of Employee's immediate family or to an attorney consulted for legal advice, provided that such persons agree to maintain the confidentiality of the Agreement. Employee represents and agrees that, since receiving this Agreement, Employee has not made, and going forward will not make, disparaging, defamatory, or derogatory remarks about the Company or its products, services, business practices, directors, officers, managers, or employees to anyone. The Company represents and agrees that, since receiving this Agreement, the Company, acting through its current members of the Board of Directors and the officer to whom Employee reports has not made, and going forward will not make, disparaging, defamatory, or derogatory remarks about Employee. Nothing in this Agreement shall prohibit Employee or the Company from participating in any communication with, or disclosing any information to, any representatives of any government agency referenced in Paragraph 5 of this Agreement or shall prohibit either the Company or Employee from providing truthful testimony in response to lawful process, or as otherwise required by law.

9. **APPLICATION OF SECTION 409A.** It is intended that all of the Severance Benefits payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Internal Revenue Code of 1986, as amended ("Code") and the regulations and other guidance thereunder and any state law of similar effect (collectively, "Section 409A") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms. In the event that the terms of this Agreement would subject Employee to any additional tax, penalty or interest under Section 409A (the "409A Penalties"), the Company and Executive shall cooperate good faith to amend the terms of this Agreement to avoid such 409A Penalties, if possible. The preceding provisions shall not be construed as a guarantee by the Company of any particular tax effect to Employee under this Agreement. The Company shall not be liable to Employee for any payment made under this Agreement which is determined to result in an additional tax, penalty or interest under Section 409A, nor for reporting in good faith any payment as an amount includible in gross income under Section 409A. Notwithstanding anything to the contrary set forth herein, no Severance Benefits will be made under this Agreement until Employee has incurred a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)). For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Employee's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment.

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10. **OTHER.** Except as expressly provided in this Agreement and except for the Confidentiality Agreement and other agreements related to Employee's equity, this Agreement supersedes all other understandings and agreements, oral or written, between the Parties and constitutes the sole agreement between the Parties with respect to its subject matter. The Parties acknowledge that no representations, inducements, promises, or agreements, oral or written, have been made by any of the Parties or by anyone acting on behalf of any of the Parties that are not embodied in this Agreement, and no agreement, statement or promise not contained or described in this Agreement shall be valid or binding on the Parties. No change or modification of this Agreement shall be valid or binding on the Parties unless such change or modification is in writing and is signed by the Parties. Employee's or the Company's waiver of any breach of a provision of this Agreement shall not waive any subsequent breach by the other Party. If a court of competent jurisdiction holds that any provision or sub-part thereof contained in this Agreement is invalid, illegal, or unenforceable, that invalidity, illegality, or unenforceability shall not affect any other provision in this Agreement.

This Agreement is intended to avoid all litigation relating to Employee's employment with the Company and Employee's separation therefrom; therefore, it is not to be construed as the Company's admission of any liability to Employee — liability that the Company denies.

This Agreement shall apply to, be binding upon, and inure to the benefit of the Parties' successors, assigns, heirs, and other representatives and be governed by North Carolina law, without regard to the conflicts of laws principles thereof, and the applicable provisions of federal law. The state and federal courts in North Carolina shall be the exclusive venues for the adjudication of all disputes arising out of this Agreement, and Employee consents to the exercise of personal jurisdiction over Employee in any such adjudication and hereby waives any and all objections and defenses to the exercise of such personal jurisdiction.

CAUTION! READ BEFORE SIGNING. THIS AGREEMENT CONTAINS A RELEASE OF ALL CLAIMS.

IN WITNESS WHEREOF, the Parties have entered into this Agreement on the date written below.

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EMPLOYEE REPRESENTS THAT EMPLOYEE HAS CAREFULLY READ THE ENTIRE AGREEMENT, UNDERSTANDS ITS CONSEQUENCES, AND VOLUNTARILY ENTERS INTO IT.

NAME

Date

LIQUIDIA TECHNOLOGIES, INC.

By: _____
Name: _____
Title: _____

Date

AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT

This **AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT** (the “**Agreement**”) is entered into effective _____, 2018 (the “**Effective Date**”), by and between Robert Lippe (“**Executive**”) and Liquidia Technologies, Inc., a Delaware corporation (the “**Company**”). Each of the Company and Executive is a “**Party**” and, collectively, they are the “**Parties**.”

The Company and Executive entered into an Executive Employment Agreement dated April 1, 2017 (the “**Prior Agreement**”); and

The Parties agree that this Agreement supersedes any and all prior employment agreement and understandings between the Parties and to provide for the employment of Executive upon the terms and conditions set forth herein.

Accordingly, in consideration of the mutual promises and covenants contained herein, the Parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 **At-Will Employment.** Executive shall be employed by the Company on an “at will” basis, meaning either the Company or Executive may terminate Executive’s employment at any time, with or without cause or advance notice. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the “at will” nature of Executive’s employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive’s rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 **Position.** Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Chief Operations Officer, and Executive hereby accepts such employment. Executive will report to the Chief Executive Officer (“**CEO**”) and/or such Company officers or directors designated by the CEO.

1.3 **Duties.** Executive shall faithfully perform all duties of the Company related to the position or positions held by Executive, including but not limited to all duties set forth in this Agreement and/or in the Bylaws of the Company related to the position or positions held by Executive and all additional duties that are reasonably prescribed from time to time by the CEO or other designated officers or directors of the Company. Executive shall devote Executive’s full business time and attention to the performance of Executive’s duties and responsibilities on behalf of the Company and in furtherance of its best interests. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s corporate headquarters in North Carolina. In addition, Executive shall make such business trips at the Company’s expense to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 **Company Policies.** Executive shall comply with all Company policies, standards, rules and regulations (a “**Company Policy**” or collectively, the “**Company Policies**”)

and all applicable government laws, rules and regulations that are now or hereafter in effect. Executive acknowledges receipt of copies of all written Company Policies that are in effect as of the date of this Agreement. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 **Salary.** Executive shall receive a monthly salary of \$34,099.08, which equates to \$409,189.00 on an annualized basis, payable subject to standard federal and state payroll withholding requirements in accordance with the Company’s standard payroll practices (“**Base Salary**”). Executive’s Base Salary may be increased from time to time by the Board of Directors of the Company (the “**Board**”). Notwithstanding anything to the contrary, the Base Salary may be reduced if the Board determines such reduction is necessary and justified by the financial condition of the Company and implements an equal percentage reduction in the base salaries of all of the Company’s executive officers, but in no event will such reduction be greater than ten percent (10%) of the Base Salary. A reduction in Executive’s Base Salary in accordance with the immediately preceding sentence shall not constitute a material diminution in Base Salary as described in Section 6.4(b) of this Agreement.

2.2 **Bonus.** During the period Executive is employed with the Company, Executive shall be eligible to earn a discretionary annual cash bonus of up to 40% of Base Salary (“**Target Amount**”), subject to review and adjustment by the Company in its sole discretion, pursuant to the terms of the Liquidia Technologies, Inc. Annual Cash Bonus Plan, as amended by the Company from time to time (the “**Bonus Plan**”), or its successor plan. Any bonus, if earned, will be paid to Executive within the time period set forth in the Bonus Plan.

2.3 **Benefits.** Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion.

2.4 **Expense Reimbursement.** The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company Policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the “**Code**”): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. The Parties have entered into a Confidentiality, Inventions and Non-Competition Agreement (the “**Confidential Information Agreement**”), which may be amended by the Parties from time to time without regard to this Agreement. The Confidential

Information Agreement contains provisions that are intended by the Parties to survive and do survive termination of this Agreement.

3.1 **Permissible Communications.** Notwithstanding anything to the contrary in the Confidential Information Agreement, Executive acknowledges that nothing in the Confidential Information Agreement shall be construed to prohibit Executive from (a) filing a charge or complaint with, or participating in any proceeding before, a government agency authorized to enforce and investigate suspected violations of federal anti-discrimination laws, labor relations laws, occupational health and safety laws, wage and hour laws, and such similar state or local laws; (b) reporting possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, or (c) responding truthfully to inquiries from, or otherwise cooperating with, any governmental or regulatory investigation (the activities set forth in clauses (a) through (c) are collectively referred to as the “**Protected Activities**”). Executive understands that in connection with such Protected Activity, Executive is permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company; *provided, however*, that Executive agrees to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Proprietary Information under the Confidential Information Agreement to any parties other than the appropriate government agencies. Executive further understands that “Protected Activity” does not include the disclosure of any Company attorney-client privileged communications, and that any such disclosure without the Company’s written consent shall constitute a material breach of this Agreement.

3.2 **Defend Trade Secrets Act.** Pursuant to the Defend Trade Secrets Act of 2016, Executive acknowledges that Executive will not have criminal or civil liability under any Federal or State trade secret law for the disclosure of a trade secret that (a) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive’s attorney and may use the trade secret information in the court proceeding, if Executive (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Except with the prior written consent of the Company, which shall not be unreasonably withheld, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive’s responsibilities and the performance of

Executive's duties hereunder, except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive's duties, and (iii) such other activities as may be specifically approved by the Company. This restriction shall not, however, preclude Executive from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or employment or

service in any capacity with Affiliates of the Company. As used in this Agreement, "**Affiliates**" means an entity under common management or control with the Company.

5. **NO CONFLICT WITH EXISTING OBLIGATIONS.** Executive represents that Executive's performance of all the terms of this Agreement and as an executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive's employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. **TERMINATION OF EMPLOYMENT.** The Parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

6.1 **Termination by the Company Without Cause.**

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below) by giving notice as described in Section 7.1 of this Agreement. A termination pursuant to Sections 6.3 and 6.5 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h) a "**Separation from Service**"), then Executive shall be entitled to receive the **Accrued Obligations** (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, then Executive shall also be entitled to receive (collectively, the "**Severance Benefits**"):

(i) an amount equal to Executive's then current Base Salary for nine (9) months (the "**Severance Period**"), less all applicable withholdings and deductions, paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter;

(ii) an amount equal to the unpaid bonus (if any) that Executive would have earned pursuant to the Bonus Plan with respect to any Performance Period (as defined in the Bonus Plan) completed prior to the termination date but for the employment requirement set forth in Section 6.3 of the Bonus Plan; and

(iii) payment of the employer portion of the premiums required to continue Executive's group health care coverage under the applicable provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("**COBRA**"), provided that Executive timely elects to continue coverage under COBRA, until the earliest of (A) the close of the Severance Period, (B) the expiration of Executive's eligibility for the continuation coverage under COBRA, or (C) the date when Executive becomes eligible for substantially equivalent

health insurance coverage in connection with new employment (such period from the termination date through the earliest of (A), (B) or (C), the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines in its sole discretion that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code, or any statute or regulation of similar effect (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings for the remainder of the COBRA Payment Period, regardless of whether Executive elects COBRA coverage (the "**Special Severance Payment**"). Executive may, but is not obligated to, use such Special Severance Payment toward the cost of COBRA premiums. If Executive becomes eligible for coverage under another employer's group health plan or otherwise ceases to be eligible for COBRA during the COBRA Payment Period, Executive must immediately notify the Company of such event, and all payments and obligations under this clause will cease.

(c) Executive will be paid all of the **Accrued Obligations** on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the **Severance Benefits** pursuant to Section 6.1(b) of this Agreement if: (i) Executive signs and delivers to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company (the "**Release**"), by the 60th day following the termination date or such earlier date as set forth in the Release, which cannot be revoked in whole or part (if applicable) by such date or such earlier date as set forth in the Release (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property in proper order and condition, reasonable wear and tear excepted, (including, but not limited to, all books, documents, papers, materials and any other property or assets relating to the business or affairs of the Company which may be in Executive's possession or under his control but excluding copies of records related to Executive's compensation from the Company and any equity ownership in the Company); (iv) Executive complies with all post-termination obligations under this Agreement and the Confidential Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in the Release. To the extent that any **Severance Benefits** are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of **Severance Benefits** will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The **Severance Benefits** provided to Executive pursuant to this Section 6.1 is in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the **Severance Benefits** for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 **Termination by the Company for Cause.**

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 7.1 of this Agreement.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that Executive has engaged in any of the following: (i) any material breach of the terms of this Agreement by Executive, or the willful failure of Executive to diligently and properly perform Executive's material duties for the Company; (ii) Executive's misappropriation or unauthorized use of the Company's tangible or intangible property that causes or is likely to cause material harm to the Company or its reputation, or material breach of the Confidential Information Agreement or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (iii) any material failure to comply with the Company Policies or any other policies and/or directives of the Board; (iv) Executive's use of illegal drugs or any illegal substance, or Executive's use of alcohol in any manner that materially interferes with the performance of Executive's duties under this Agreement; (v) any (A) dishonest or illegal action (including, without limitation, embezzlement) by Executive, or (B) other action, whether or not dishonest or illegal, by Executive, in either case which is materially detrimental to the interest and well-being of the Company, including, without limitation, harm to its reputation; (vi) Executive's failure to fully disclose any material conflict of interest Executive may have with the Company in a transaction between the Company and any third party which is materially

detrimental to the interest and well-being of the Company; (vii) any adverse action or omission by Executive which would be required to be disclosed pursuant to public securities laws or which would limit the ability of the Company or any entity affiliated with the Company to sell securities under any Federal or state law or which would disqualify the Company or any affiliated entity from any exemption otherwise available to it; or (viii) become prohibited by law or any order from any regulatory body or governmental body from being an employee or director of any company, firm or entity; *provided, however*, that prior to any termination of Executive for "Cause," if the grounds for such Cause are reasonably capable of cure by Executive, the Company shall provide Executive with written notice of the grounds for Cause and provide Executive with ten (10) business days in which to cure such Cause.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

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6.3 **Resignation by Executive.**

(a) Executive may resign from Executive's employment with the Company at any time by giving notice as described in Section 7.1.

(b) In the event Executive resigns from Executive's employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.4 **Resignation by Executive for Good Reason.**

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior consent: (i) a material diminution in Executive's authority, duties or responsibilities; (ii) a material diminution in Executive's Base Salary; (iii) a requirement that Executive report to an employee other than the CEO; (iv) Executive's principal place of employment is relocated by more than fifty (50) miles from the Company's present location in Research Triangle Park, North Carolina; or (v) the Company materially breaches its obligations under this Agreement. In addition to any requirements set forth above, in order for any of the above events to constitute "Good Reason," Executive must (X) inform the Company of the existence of the event within sixty (60) days of the initial existence of the event, after which date the Company shall have no less than thirty (30) days to cure the event which otherwise would constitute "Good Reason" hereunder and (Y) Executive must terminate his employment with the Company for such "Good Reason" no later than ninety (90) days after the initial existence of the event which prompted Executive's termination. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.1(c) above, Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1 and on the same terms and conditions set forth in Section 6.1(c) and Section 6.1(e) as if Executive had been terminated by the Company without Cause.

(d) Any damages caused by the termination of Executive's employment for Good Reason would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

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6.5 **Termination by Virtue of Death or Disability of Executive.**

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because a qualified medical doctor mutually acceptable to the Company and Executive or Executive's personal representative has certified in writing that: (A) Executive is unable, because of a medically determinable physical or mental disability, to perform the essential functions of Executive's job, with or without a reasonable accommodation, for more than one hundred and eighty (180) calendar days measured from the last full day of work; or (B) by reason of mental or physical disability, it is unlikely that Executive will be able, within one hundred and eighty (180) calendar days, to resume the essential functions of Executive's job, with or without a reasonable accommodation, and to otherwise discharge Executive's duties under this Agreement. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.6 **Change in Control Benefits.** In the event the Company (or any surviving or acquiring corporation) terminates Executive's employment without Cause or Executive resigns for Good Reason within twelve (12) months following the effective date of a Change in Control (as defined under the Liquidia Technologies, Inc. 2016 Equity Incentive Plan, as may be amended from time to time by the Company (the "**Plan**")), then Executive shall be entitled to the Accrued Obligations and, provided that Executive complies with the obligations in Section 6.1(c) of this Agreement (including the requirement to provide an effective Release), Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1(b) and on the same conditions as if Executive had been terminated by the Company without Cause; *provided, however*, that (a) the Severance Period shall be increased to twelve (12) months; (b) the bonus set forth in Section 6.1(b)(ii) shall instead be payable at the Target Amount; and (c) in the event that Executive's outstanding equity as of the closing of the Change in Control is assumed or continued (in accordance with its terms) by the surviving entity in a Change in Control, then 100% of the unvested portion of such equity shall become vested.

6.7 **Cooperation With Company After Termination of Employment.** Following termination of Executive's employment for any reason and for a period of one (1) year thereafter, Executive agrees to cooperate (a) with the Company in (i) the defense of any legal matter involving any matter that arose during Executive's employment with the Company, and (ii) all matters relating to the winding up of Executive's pending work and the orderly transfer of any such pending work to such other employees as may be designated by the Company; and (b) with all government authorities on matters pertaining to any investigation, litigation or administrative

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proceeding pertaining to the Company. The Company will reimburse Executive for any reasonable travel and out of pocket expenses incurred by Executive in providing such cooperation. The Company will also pay Executive a per diem amount equal to Executive's Base Salary as of the date of termination divided by two hundred and thirty (230) for each day or partial day that Executive devotes to fulfilling his obligation to cooperate under this Section 6.7, unless Executive is then receiving continued payment of his Base Salary under 6.1(b)(ii), above. Following termination of Executive's employment for any reason, and in the event of a failure by Executive (following reasonable efforts by the Company to secure his voluntary cooperation) to resign from any position as officer or director of the Company, with such resignation to be effective no later than the date of Executive's termination date (or such other date as requested by the Board), the Company is hereby irrevocably authorized to appoint its then-current Chief Executive Officer to act in Executive's name and on his behalf to execute any documents and to do all things reasonably necessary to effect such resignation. Further, Executive shall not, at any time after termination of Executive's employment for any reason, represent himself as being an agent or representative of the Company, unless expressly authorized in a written agreement executed by an authorized officer of the Company.

6.8 **Application of Section 409A.**

(a) It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms.

(b) The preceding provisions shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. The Company shall not be liable to Executive for any payment made under this Agreement which is determined to result in an additional tax, penalty or interest under Section 409A, nor for reporting in good faith any payment as an amount includible in gross income under Section 409A.

(c) No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

(d) For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment.

(e) If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the

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Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance Benefits will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (1) pay to Executive a lump sum amount equal to the sum of the Severance Benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the Severance Benefits had not been delayed pursuant to this Section 6.8, and (2) commence paying the balance of the Severance Benefits in accordance with the applicable payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.8.

6.9 **Parachute Payments.**

(a) Notwithstanding any other provisions of this Agreement to the contrary, in the event that it shall be determined that any payment or distribution to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (a "**Payment**") would be nondeductible by the Company for Federal income tax purposes because of Section 280G of the Code, the Company shall reduce the aggregate present value of the Payments under this Agreement to the Reduced Amount (as defined below) if, and only if, reducing the Payments under this Agreement will provide Executive with a greater net after-tax amount than would be the case if no such reduction was made, taking into account the applicable federal, state, local and foreign income, employment and other taxes, including the excise tax imposed by Section 4999 of the Code. If a reduction in the Payments is necessary, such reduction shall occur in the following order: (1) reduction of cash payments; (2) cancellation of accelerated vesting of equity awards other than stock options; (3) cancellation of accelerated vesting of stock options; and (4) reduction of other benefits paid to Executive. Within any such category of payments and benefits (that is, clauses (1), (2), (3) or (4) of this Section 6.9(a)), a reduction shall occur first with respect to amounts that are not "deferred compensation" within the meaning of Section 409A of the Code and then with respect to amounts that are. The "**Reduced Amount**" shall be an amount expressed in present value that maximizes the aggregate present value of Payments under this Agreement without causing any Payment to be nondeductible by the Company because of Section 280G of the Code.

(b) All determinations to be made under this Section 6.9 shall be made at the Company's expense by a firm of certified public accountants of national standing selected by the Company (the "**Accounting Firm**") which may be the firm regularly auditing the financial statements of the Company. The Company and Executive shall furnish to the Accounting Firm such information and documents as the Accounting Firm may reasonably require in order to make a determination under this Section. To the extent requested by Executive, the Company shall cooperate with Executive in good faith in valuing, and the Accounting Firm shall value, services to be provided by Executive (including refraining from performing services pursuant to a covenant not to compete) before, on or after the date of the transaction which cause the application of Section 280G of the Code such that payments in respect of such services may be considered to be "reasonable compensation" within the meaning of the regulations under Section 280G of the Code. In making its determinations hereunder, the Accounting Firm shall apply reasonable, good faith interpretations regarding the applicability of Section 280G and Section

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4999, along with any other applicable portions of the Code or other tax laws. The Accounting Firm shall make all determinations required to be made under this Section and shall provide detailed supporting calculations to the Company and Executive within 30 days after the Termination Date or such earlier time as is requested by the Company, and provide an opinion to Executive that he or she has substantial authority not to report any excise tax on his or her Federal income tax return with respect to any Payments. Any such determination by the Accounting Firm shall be binding upon the Company and Executive. Subject to Sections 6.1(c) and 6.9, within five business days thereafter, the Company shall pay to or distribute to or for the benefit of Executive such amounts as are then due to Executive under this Agreement.

(c) As a result of the uncertainty in the application of Section 280G of the Code at the time of the initial determination by the Accounting Firm or the Company hereunder, it is possible that Payments, as the case may be, will have been made by the Company which should not have been made ("**Overpayment**") or that additional Payments, as the case may be, which will not have been made by the Company could have been made ("**Underpayment**"), in each case, consistent with the calculations required to be made hereunder. In the event that the Accounting Firm, based upon the assertion of a deficiency by the Internal Revenue Service against Executive which the Accounting Firm believes has a high probability of success determines that an Overpayment has been made, promptly on notice and demand Executive shall repay to the Company any such Overpayment paid or distributed by the Company to or for the benefit of Executive together with interest at the applicable Federal rate provided for in Section 7872(f)(2)(A) of the Code; provided, however, that no such amount shall be payable by Executive to the Company if and to the extent such payment would not either reduce the amount on which Executive is subject to tax under Section 1 and Section 4999 of the Code or generate a refund of such taxes. In the event that the Accounting Firm, based upon controlling precedent or other substantial authority, determines that an Underpayment has occurred, any such Underpayment shall be promptly paid by the Company to or for the benefit of Executive together with interest at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code.

7. **GENERAL PROVISIONS.**

7.1 **Notices.** Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the Party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 **Severability.** Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed,

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construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 **Survival.** Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the Parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

7.4 **Waiver.** If either Party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 **Complete Agreement.** This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in

writing signed by Executive and an authorized officer of the Company, subject to the approval of the Board, its compensation committee or (if necessary) the stockholders of the Company. The Parties have entered into a separate Confidential Information Agreement and have entered or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the Parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the Parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 **Headings.** The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 **Successors and Assigns.** The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a Party, but may not otherwise assign this Agreement or its rights and obligations hereunder. Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Executive's estate upon death.

7.8 **Withholding.** All amounts payable hereunder shall be subject to applicable tax withholding.

7.9 **Choice of Law.** This Agreement in all respects shall be governed by and interpreted in accordance with the laws of the State of North Carolina, both procedural and substantive, without regard to conflicts of law, except to the extent that federal laws and regulations preempt otherwise applicable law.

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7.10 **Mandatory Mediation.** Prior to and as a condition of either Party's filing suit in state or federal court, the Parties shall engage in a mediated settlement conference in accordance with the North Carolina Superior Court Rules Implementing Statewide Mediation. The Parties shall mediate in good faith until settlement is reached or an impasse is declared by the mediator.

7.11 **Jurisdiction.** Each Party hereby irrevocably submits to the exclusive jurisdiction of the United States District Court located in Wake County, North Carolina, or any state court located within such state, in respect of any claim relating to this Agreement or Executive's employment with the Company, and hereby waives, and agrees not to assert, as a defense in any action, suit or proceeding in which any such claim is made that said Party is not subject thereto or that such action, suit or proceeding may not be brought or is not maintainable in such courts or that the venue thereof may not be appropriate or that this Agreement may not be enforced in or by such courts. Any appellate proceedings shall take place in the appropriate courts having appellate jurisdiction over the courts set forth in this Section.

7.12 **Counterparts.** This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one Party, but all of which taken together will constitute one and the same Agreement. Facsimile signatures and signatures transmitted by PDF shall be equivalent to original signatures.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

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IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first written above.

LIQUIDIA TECHNOLOGIES, INC.

By:

Name: Neal Fowler
Title: Chief Executive Officer

Executive:

Robert Lippe

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Exhibit A

CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

A-1



CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

THIS CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT (this "Agreement") is effective as of DATE (the "Effective Date") by and between NAME (hereinafter "Employee") and Liquidia Technologies, Inc. (the "Company").

STATEMENT OF PURPOSE

The Employee desires to be employed by the Company, and the Company is willing to employ Employee strictly subject to Employee's agreement to be bound by the terms of this Agreement.

IN CONSIDERATION of the Company's employment of the Employee and the compensation and other benefits that the Company may provide to Employee as an employee, the Employee, intending to be legally bound, agrees to the following:

1. For purposes of this Agreement, "Proprietary Information" is information (whether in written or other form or whether or not patentable or protectable by copyright, trade secret, trade dress, trademark, or the like) that: (i) has been created, invented, discovered, or developed by the Employee in connection with the Employee's employment by the Company; (ii) is non-public and has been disclosed, furnished, or communicated to the Employee in connection with the Employee's employment by the Company; or (iii) is non-public and the unauthorized disclosure of which could be detrimental to the interests of the Company. Proprietary Information includes, but is not limited to, all inventions, works of authorship, trade secrets, know how, proprietary or confidential information, including, but not limited to, research, product or business plans, products, services, projects, proposals, processes, formulas, ideas, data, compositions, technology, computer programs and related source code and object code, developments, designs, drawings, marketing information and plans, customer lists, budgets, projections, partners, cost analyses, acquisition candidates, relevant parts of analysis, reviews, compilations, studies or other records and documents, and other information owned by the Company, disclosed to the Employee, or to which the Employee has been provided access or gains access, either directly or indirectly, by any means. Proprietary Information does not include information that is or becomes

generally available to the public other than as a result of a disclosure by the Employee or by any other person or entity that is under a confidentiality obligation to Company with respect to such information.

2. Nondisclosure of Proprietary Information.

2.1 The Employee acknowledges and agrees that Proprietary Information is the sole property of the Company or its designee and that the Employee shall have no right,

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title, license, or interest in or to any Proprietary Information. During and after the Employee's employment by the Company, the Employee shall keep in the strictest confidence and trust all Proprietary Information and shall not directly or indirectly disclose, distribute, copy, supply, or use, in whole or in part, any Proprietary Information except as approved in advance in writing by the Company. Notwithstanding the foregoing, it is understood that, at all such times, the Employee is free (i) to use information which was known to the Employee prior to employment with the Company or which is generally known in the trade or industry through no breach of this Agreement or other act or omission by the Employee, (ii) to discuss the terms of the Employee's employment, wages and working conditions to the extent expressly protected by applicable law, (iii) to report possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, (iv) to respond to inquiries from, or otherwise cooperate with, any governmental or regulatory investigation, or (v) to testify truthfully as compelled by lawful process or subpoena related to such testimony after the Employee has provided advance written notice of said subpoena to the Company's Chief Executive Officer and reasonably cooperates with the Company in any process to oppose said subpoena.

2.2 The Employee shall not use or disclose to the Company, or assist in the disclosure to the Company of, proprietary or confidential information belonging to any third parties, including any prior employer(s).

2.3 The Employee acknowledges and agrees that the Company has received and in the future may receive from third parties, including, but not limited to, potential collaborating partners or customers of the Company, confidential or proprietary information ("**Third Party Information**") 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. During the term of the Employee's employment with the Company and thereafter, the Employee will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than Company personnel or the Company's designee who need to know such information in connection with their work for the Company or such third party) or use Third Party Information, except in connection with the Employee's work for the Company or such third party, unless expressly approved in advance in writing by the Company. The Employee further agrees to be bound by and subject to any confidentiality or nondisclosure agreements or clauses with respect to such Third Party Information between the Company and any such third party.

2.4 Pursuant to the Defend Trade Secrets Act of 2016, the Employee acknowledges that the Employee will not have criminal or civil liability under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (a) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney and (b) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if the Employee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Employee may

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disclose the trade secret to the Employee's attorney and may use the trade secret information in the court proceeding, if the Employee (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

3. Upon the earliest to occur of (i) termination of the Employee's employment by the Company for any reason, (ii) termination of the Employee's access to Proprietary Information, or (iii) the request of the Company, the Employee shall return to the Company (and will not keep in Employee's possession or control or deliver to anyone else) all materials belonging to the Company, whether kept at the Employee's business office, personal residence or otherwise, including, but not limited to, all materials containing or relating to any Proprietary Information in any written, tangible, electronic or other form that the Employee may have in Employee's possession or control, and any and all mobile telephones, personal digital assistants, pagers, computer and other electronic devices and credit cards. After returning the materials and equipment described in the preceding sentence to the Company, the Employee shall not retain any copies of any such materials.

4. Ownership of Proprietary Information.

4.1 All Proprietary Information and other information, which by its nature is proprietary to the Company, relating to the Company's business or the Company's anticipated business, or based on, derived from or relating to any Proprietary Information (collectively, Proprietary Information and "**Work Product**") shall be the sole property of the Company. The Employee agrees that all Proprietary Information and Work Product created, conceived, reduced to practice, made or otherwise developed by the Employee, solely or jointly, during and in any way related to the Employee's employment, shall be the exclusive property of the Company and/or its designees or assignees, and shall be deemed "works made for hire," as that term is defined in Section 101 of the U.S. Copyright Act of 1976, as amended.

4.2 If, for any reason, any Proprietary Information and Work Product does not qualify as works made for hire, the Employee shall assign and does hereby irrevocably, unconditionally, and without encumbrance of any kind assign to the Company, and forever waives and agrees never to assert, all right, title, and interest, including without limitation, all patent, trademark, copyright, trade secret, and other intellectual property (collectively, "**Intellectual Property**") rights, in and to such Proprietary Information and Work Product. The Employee shall assist the Company, or its designee, in every proper way to secure the Company's rights in the Proprietary Information and Work Product and any Intellectual Property rights relating thereto in any and all countries, including (i) the disclosure to the Company of all pertinent information and data with respect thereto, (ii) the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company or its designee the sole and exclusive right, title and interest in and to the Proprietary Information and Work Product, and (iii) the defense of any claim, demand, action, litigation, suit, or other proceeding.

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including, but not limited to, interference, cancellation, opposition, or other proceedings in respect of such applications or any registrations or patents issuing therefrom. The Employee shall continue such assistance after the termination of the Employee's employment by the Company.

4.3 During the Employee's employment by the Company, the Employee shall report promptly to the Company all Proprietary Information and Work Product created, conceived, reduced to practice, or otherwise developed by the Employee, solely or jointly.

4.4 If the Company is unable because of the Employee's mental or physical incapacity or for any other reason to secure the Employee's signature to apply for or to secure protection of any Proprietary Information and Work Product, then the Employee hereby designates and appoints the Company and its duly authorized officers and agents as its agents and attorneys-in-fact to execute and file any certificates, applications or documents and to do all of their lawful acts necessary to perfect and protect the Company's rights in the Proprietary Information and Work Product. The Employee expressly acknowledges that the foregoing power of attorney is coupled with an interest and is therefore irrevocable and shall survive the Employee's death or incompetency and the termination of the Employee's employment or engagement by the Company.

4.5 The Employee hereby represents and warrants that the Employee has fully disclosed to the Company on Schedule A attached hereto any idea, invention, discovery or process relating to the Company's business which, prior to the Employee's employment with the Company, the Employee conceived, reduced to practice, or developed, individually or jointly, and is to be excluded from the scope of this Agreement.

4.6 Notwithstanding anything in this Agreement to the contrary, the obligation of the Employee to assign or offer to assign the Employee's rights in an invention to the Company shall not extend or apply to an invention that the undersigned developed (i) entirely on the Employee's own time; (ii) without using Company equipment, supplies, facilities, or other resources, Proprietary Information or trade secret information unless such invention (a) relates to the Company's business or actual or demonstrably anticipated research or development, or (b) results from any work performed by the Employee for the Company. The Employee shall bear the burden of proof in establishing that the Employee's invention qualifies for exclusion under this Section 4.6.

5. Covenant Not To Compete.

5.1 For purposes of Part 5 of this Agreement, including each of its subparts, the following terms shall have the following meanings:

a. **“Competing Business”** shall mean any corporation, partnership, person, or other entity that is researching, developing, manufacturing, marketing, distributing, or selling any product, service, or technology that is competitive with any part of the Company’s Business.

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b. The **“Company’s Business”** shall mean the development, manufacture, marketing, distribution, or sale of, including research directed to, any product, service, or technology that the Company is developing, manufacturing, marketing, distributing, or selling or to which the Company directed research at any time during Employee’s employment with the Company. As of the date of this Agreement, the Company’s Business includes, but is not limited to, research directed to and the development, manufacture, marketing, distribution, and/or sale of: (i) isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold; (ii) size and/or shape controllable pharmaceutical or therapeutic particles molded using a polymer or low surface energy mold; (iii) film based products of or containing arrays of size and/or shape controlled structures molded from a low surface energy mold; (iv) isolated nano or micro size and/or shape controlled particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled particles fabricated from a mold; (v) nano or micro size and/or shape controllable particles molded using a polymer or low surface energy mold; or (vi) patterned drum fabrication and mold for manufacturing the products of (i)-(v) above. The Employee understands that during the Employee’s employment with the Company, the Company’s Business may expand or change, and the Employee agrees that any such expansions or changes shall expand or contract the definition of the Company’s Business and the Employee’s obligations under this Agreement accordingly.

c. **“Territory”** shall mean the following severable geographic areas: (i) the world, (ii) any country in which the Company or a Competing Business is engaged in business, (iii) any country in which the Company is engaged in business, (iv) the United States, Europe, and Asia, (v) the United States, (vi) any state, including the District of Columbia, in which the Company or a Competing Business is engaged in business, (vii) any state, including the District of Columbia, in which the Company is engaged in business, (viii) North Carolina, (ix) a one hundred mile radius of the Employee’s principal place of employment or work for the Company, or (x) a one hundred mile radius of the Company’s corporate headquarters.

5.2 It is recognized and understood by the Employee that, through the Employee’s association with the Company, the Employee shall: (i) have access to trade secrets and confidential information of the Company, including, but not limited to, valuable information about its intellectual property, business operations and methods, and the persons with which it does business in various locations throughout the world, that is not generally known to or readily ascertainable by the Company’s competitors, (ii) develop relationships with the Company’s customers and others with which the Company does business, and these relationships are among the Company’s most important assets, (iii) receive specialized knowledge of and specialized training in the Company’s Business, and (iv) gain such knowledge of the Company’s Business that, during the course of the Employee’s employment with the Company and for a period of one year following the termination thereof, the Employee could not perform services for a Competing Business

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without inevitably disclosing the Company’s trade secrets and Proprietary Information to that Competing Business.

5.3 While employed by the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise) for any Competing Business, (ii) engage in any activities (or assist others to engage in any activities) that compete with the Company’s Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing or prospective customers, suppliers, business partners, or contractors of the Company to curtail or cancel their business with the Company or to do business within the scope of the Company’s Business with a Competing Business, or (v) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company.

5.4 For a period of one year following the termination of the Employee’s employment with the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise), within the Territory for any Competing Business, that are the same or substantially similar to any services that the Employee performed for the Company or that otherwise utilize skills, knowledge, and/or business contacts and/or relationships that the Employee developed while providing services to the Company, (ii) engage in any activities (or assist others to engage in any activities) within the Territory that compete with the Company’s Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or any prospective customers to whom the Company has made a written proposal (“Prospective Customers”), suppliers, business partners, or contractors of the Company, during the last year of the Employee’s employment with the Company, to curtail or cancel their business with the Company or to do business within the scope of the Company’s Business with a Competing Business, (v) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or Prospective Customers, suppliers, business partners, or contractors of the Company with which the Employee worked or had business contact during the last year of the Employee’s employment with the Company to curtail or cancel their business with the Company or to do business within the scope of the Company’s Business with a Competing Business, or (vi) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company. Where a Competing Business is a large enterprise with separately operated business units, the restrictions in Section 5.4(i) shall not apply to any such business unit that has no involvement in the research, development, manufacture, marketing, distribution, or sale of a product, service, or technology that is competitive with any part of the Company’s Business; *provided, however*, that this sentence does not apply to any employees in a scientific role or whose role involves the research, development or maintenance of the Company’s trade secrets. These obligations will continue for the specified period regardless of whether the termination of the Employee’s

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employment was voluntary or involuntary or with or without cause, and the specified period shall be tolled and shall not run during any time in which the Employee fails to abide by this obligations.

5.5 The Employee shall not at any time following the termination of the Employee’s employment with the Company use the name or trading style of the Company in any country, or use in any country any name or trading style which is the same as or similar to any of the trade or service marks of the Company or any brand name or proposed brand name of any of the Company’s products or proposed products, or represent himself or herself as carrying on or continuing or being connected with the Company or its business for any purpose whatsoever unless otherwise agreed by the Company in writing.

5.6 While employed by the Company, the Employee shall disclose to the audit committee of the Company the Employee’s interest in respect of any contract or arrangement in which the Employee has any personal material interest, directly or indirectly, or any conflicts of interest (including the conflict of interest that may arise from the Employee’s directorship(s) or executive position or personal investments in any corporation(s)) that may involve the Employee. Upon such disclosure, the Employee shall abstain from voting in respect of any such contract, arrangement, proposal, transaction, or matter in which the conflict of interest arises, unless and until the audit committee has determined that no such conflict of interest exists.

5.7 As an exception to the restrictions set forth in Parts 5.3 and 5.4 herein, the Employee may own passive investments in a Competing Businesses, (including, but not limited to, indirect investments through mutual funds), provided that the securities of the Competing Business are publicly traded and the Employee does not own or control more than two percent of the outstanding voting rights or equity of the Competing Business.

5.8 In the event that a court determines that the length of time, the geographic area, or the activities prohibited under this Agreement are too restrictive to be enforceable, the Court may reduce the scope of the restriction to the extent necessary to make the restriction enforceable.

5.9 The market for the Company’s services and the Company’s Business is highly specialized and highly competitive such that other companies and business entities compete with the Company in various locations throughout the world. The provisions set forth in this Agreement: (i) are reasonably necessary to protect the Company’s legitimate business interests, (ii) are reasonable as to the time, territory, and scope of activities that are restricted, (iii) do not interfere with the Employee’s ability to earn a comparable living or secure employment in the field of the Employee’s choice, (iv) do not interfere and are not inconsistent with public policy or the public interest, and (v) are described with sufficient accuracy and definiteness to enable the Employee to understand the scope of the restrictions on the Employee.

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5.10 Because of the unique nature of the Proprietary Information, the Employee understands and agrees that the Company will suffer irreparable harm in the event that the Employee fails to comply with any of the Employee's obligations under this Agreement and that monetary damages will be inadequate to compensate the Company for such breach. Accordingly, the Employee agrees that the Company will, in addition to any other remedies available to it at law or in equity, be entitled to injunctive relief to enforce the terms of this Agreement.

6. The Employee hereby authorizes the Company to provide a copy of this Agreement, including any exhibits hereto, to any and all of the Employee's future employers and to notify any and all such future employers that the Company intends to exercise its legal rights arising out of or in connection with this Agreement and/or any breach or any inducement of a breach hereof.

7. The Employee agrees that, during the term of the Employee's employment with the Company, the Employee will not: (i) engage in any other employment, occupation, consulting, or other business activity that conflicts with the Employee's obligations to the Company, or (ii) engage in any other activities that conflict with the Employee's obligations to the Company.

8. Debarment Certification

8.1 The Employee represents and promises that Employee:

- (a) is not presently, and during the Employee's employment will not be, debarred or convicted for a crime for which Employee can be debarred under the Generic Drug Enforcement Act of 1992 (21USC335a)(the "Act"); and
- (b) is not presently, and during the Employee's employment will not be, indicted or otherwise criminally or civilly charged by a government entity (Federal or State) with commission of the kinds of conduct for which Employee can be debarred under the Act; and
- (c) will not employ or otherwise engage any individual who has been (i) debarred or (ii) convicted of a crime for which a person can be debarred under the Act, in any capacity in connection with the activities of developing or reporting data which may become part of an application for approval of a drug or biologic.

8.2 The Employee promises that, during the Employee's employment with the Company, the Employee will promptly notify the Company upon learning of or having a belief that the Employee cannot satisfy the obligations of Section 8.1 above.

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9. The Employee agrees that this Agreement shall be enforced, construed and interpreted under the law of the state of North Carolina, without regard to the conflicts of laws principles thereof. The state and federal courts in North Carolina shall be the exclusive venues for the adjudication of all disputes arising out of this Agreement, and the Employee consents to the exercise of personal jurisdiction over the Employee in any such adjudication and hereby waives any and all objections and defenses to the exercise of such personal jurisdiction.

10. The Employee agrees that: (i) the Employee's employment relationship with the Company is "at-will," which means that either the Employee or the Company can terminate the relationship at any time for any reason or no reason, with or without notice, unless the Employee and the Company are parties to a contract that expressly provides a fixed term of employment, (ii) the Employee's employment relationship with the Company is contingent upon the Employee's execution of this Agreement, which is a material inducement to the Company to offer the employment relationship to the Employee and to provide Proprietary Information to the Employee, and (iii) this Agreement shall survive any termination for any reason whatsoever of the Employee's employment relationship with the Company.

11. The Employee agrees that the Company's failure to insist upon strict compliance with any provision of this Agreement shall not be deemed a waiver of such provision or of any other provision in the Agreement. The provisions of this Agreement shall be enforceable, notwithstanding the existence of any breach of this Agreement by the Company or of any claim by the Employee against the Company, whether predicated on this Agreement or otherwise.

12. This Agreement contains the entire understanding between the parties with respect to the subject matter hereof and supersedes all prior or contemporary agreements or understandings, whether written or oral, with respect thereto, provided, however, prior to the execution of this Agreement, if Company and the Employee were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. This Agreement may not be modified or amended except by an agreement in writing signed by both parties.

13. The Employee agrees that this Agreement is assignable by the Company at the Company's discretion and the Employee authorizes the Company's successors and assigns to enforce this Agreement for their respective benefits.

14. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

15. The Employee agrees that a breach of any provision(s) of this Agreement will toll the running of the limitation period with respect to such provision(s) for as long as such breach occurs.

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16. The Employee agrees and acknowledges that the Company's agreement to employ the Employee, in and of itself, is sufficient and adequate consideration for the Employee's promises and obligations hereunder, and that the compensation and other benefits that the Company provides the Employee during the course of the Employee's employment are, independently and collectively, sufficient and adequate consideration for the Employee's promises and obligations hereunder.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Employee has executed this Agreement to be effective as of the date set forth above.

LIQUIDIA TECHNOLOGIES, INC.

By: _____ (s)
Name:
Title:

NAME (s)

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SCHEDULE A

The following items are inventions, ideas, computer software programs or other equipment or technology not covered by Section 4 of this Agreement, which the undersigned conceived of or developed, wholly or in part, prior to the Employee's employment or engagement with the Company and shall be excluded from the scope of this Agreement.

If the undersigned has no such items to disclose, write "NONE" on this line:

Description of Items: (if applicable)

LIQUIDIA TECHNOLOGIES, INC.

By: _____

NAME _____

Dated: _____

Dated: _____

AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT

This **AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT** (the “**Agreement**”) is entered into effective January 22, 2018 (the “**Effective Date**”), by and between Tim Albury (the “**Executive**”) and Liquidia Technologies, Inc., a Delaware corporation (the “**Company**”). Each of the Company and Executive is a “**Party**” and, collectively, they are the “**Parties**.”

The Company and Executive entered into an Executive Employment Agreement effective April 1, 2017 (the “**Prior Agreement**”); and

The Company and Executive have agreed to amend and restate the Prior Agreement as set forth in this Agreement to reflect certain adjustments to Executive’s employment relationship with the Company.

Accordingly, in consideration of the mutual promises and covenants contained herein, the Parties agree to the following:

1. EMPLOYMENT BY THE COMPANY.

1.1 **At-Will Employment.** Executive shall be employed by the Company on an “at will” basis, meaning either the Company or Executive may terminate Executive’s employment at any time, with or without cause or advance notice. Any contrary representations that may have been made to Executive shall be superseded by this Agreement. This Agreement shall constitute the full and complete agreement between Executive and the Company on the “at will” nature of Executive’s employment with the Company, which may be changed only in an express written agreement signed by Executive and a duly authorized officer of the Company. Executive’s rights to any compensation following a termination shall be only as set forth in Section 6.

1.2 **Position.** Subject to the terms set forth herein, the Company agrees to employ Executive in the position of Senior Vice President, Chief Accounting Officer, and Executive hereby accepts such employment. Executive will report to the Chief Financial Officer (“**CFO**”) and/or such executive designated by the CFO. Executive agrees that, by accepting this Agreement, Executive consents to the changes to Executive’s position, duties, and responsibilities as set forth in this Agreement and agrees that such changes alone will not result in any right of Executive to terminate employment for Good Reason, as defined herein or in any other context, and receive the Severance Benefits described herein or any other similar benefits under any contractual arrangement, including the Prior Agreement.

1.3 **Duties.** Executive shall faithfully perform all duties of the Company related to the position or positions held by the Executive, including but not limited to all duties set forth in this Agreement and/or in the Bylaws of the Company related to the position or positions held by the Executive and all additional duties that are reasonably prescribed from time to time by the CFO or other designated officers of the Company. Executive shall devote the Executive’s full business time and attention to the performance of the Executive’s duties and responsibilities on behalf of the Company and in furtherance of its best interests. Executive shall perform Executive’s duties under this Agreement principally out of the Company’s corporate

headquarters. In addition, Executive shall make such business trips at the Company’s expense to such places as may be necessary or advisable for the efficient operations of the Company.

1.4 **Company Policies.** The Executive shall comply with all Company policies, standards, rules and regulations (a “**Company Policy**” or collectively, the “**Company Policies**”) and all applicable government laws, rules and regulations that are now or hereafter in effect. The Executive acknowledges receipt of copies of all written Company Policies that are in effect as of the date of this Agreement. Notwithstanding the foregoing, in the event that the terms of this Agreement differ from or are in conflict with the Company’s general employment policies or practices, this Agreement shall control.

2. COMPENSATION.

2.1 **Salary.** Executive shall receive a monthly salary of \$29,333.33, which equates to \$352,000.00 on an annualized basis, payable subject to standard federal and state payroll withholding requirements in accordance with the Company’s standard payroll practices (“**Base Salary**”). Executive’s Base Salary may be increased from time to time by the Board of Directors of the Company (the “**Board**”). Notwithstanding anything to the contrary, the Base Salary may be reduced if the Board determines such reduction is necessary and justified by the financial condition of the Company and implements an equal percentage reduction in the base salaries of all of the Company’s executive officers, but in no event will such reduction be greater than ten percent (10%) of the Base Salary. A reduction in Executive’s Base Salary in accordance with the immediately preceding sentence shall not constitute a material diminution in Base Salary as described in Section 6.4(b) of this Agreement.

2.2 **Bonus.** During the period Executive is employed with the Company, Executive shall be eligible to earn for Executive’s services to be rendered under this Agreement a discretionary annual cash bonus of up to 25% of Base Salary (“**Target Amount**”), subject to review and adjustment by the Company in its sole discretion, payable subject to standard federal and state payroll withholding requirements. Whether or not Executive earns any bonus will be dependent upon (a) Executive’s continuous performance of services to the Company through the date any bonus is paid; and (b) the actual achievement by Executive and the Company of the applicable performance targets and goals set by the Board in advance of, or within the first quarter of, each calendar year. The annual period over which performance is measured for purposes of this bonus is January 1 through December 31. The Board will determine in its reasonable discretion the extent to which Executive and the Company have achieved the performance goals upon which the bonus is based and the amount of the bonus, which could be below the Target Amount (and may be zero). Any bonus shall be subject to the terms of any applicable incentive compensation plan adopted by the Company. Any bonus, if earned, will be paid to Executive within the time period set forth in the incentive compensation plan, or if no such time period was established, within two and one-half months following the end of the year during which the bonus is earned.

2.3 **Benefits.** Executive will be eligible to participate on the same basis as similarly situated employees in the Company’s benefit plans in effect from time to time during Executive’s employment. All matters of eligibility for coverage or benefits under any benefit

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plan shall be determined in accordance with the provisions of such plan. The Company reserves the right to change, alter, or terminate any benefit plan in its sole discretion.

2.4 **Expense Reimbursement.** The Company shall reimburse Executive for all customary and appropriate business-related expenses actually incurred and documented in accordance with Company Policy, as in effect from time to time. For the avoidance of doubt, to the extent that any reimbursements payable to Executive are subject to the provisions of Section 409A of the Internal Revenue Code of 1986, as amended (the “**Code**”): (a) any such reimbursements will be paid no later than December 31 of the year following the year in which the expense was incurred, (b) the amount of expenses reimbursed in one year will not affect the amount eligible for reimbursement in any subsequent year, and (c) the right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

3. PROPRIETARY INFORMATION, INVENTIONS, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. The parties have entered into a Confidentiality, Inventions and Non-Competition (the “**Confidential Information Agreement**”), which may be amended by the parties from time to time without regard to this Agreement. The Confidential Information Agreement contains provisions that are intended by the Parties to survive and do survive termination of this Agreement.

4. OUTSIDE ACTIVITIES DURING EMPLOYMENT. Except with the prior written consent of the Company, which shall not be unreasonably withheld, Executive will not, while employed by the Company, undertake or engage in any other employment, occupation or business enterprise that would interfere with Executive’s responsibilities and the performance of Executive’s duties hereunder, except for (i) reasonable time devoted to volunteer services for or on behalf of such religious, educational, non-profit and/or other charitable organization as Executive may wish to serve, (ii) reasonable time devoted to activities in the non-profit and business communities consistent with Executive’s duties, (iii) such other activities as may be specifically approved by the Company. This restriction shall not, however, preclude Executive from owning less than one percent (1%) of the total outstanding shares of a publicly traded company, or employment or service in any capacity with Affiliates of the Company. As used in this Agreement, “**Affiliates**” means an entity under common management or control with the Company.

5. NO CONFLICT WITH EXISTING OBLIGATIONS. Executive represents that Executive’s performance of all the terms of this Agreement and as an executive of the Company do not and will not breach any agreement or obligation of any kind made prior to Executive’s employment by the Company, including agreements or obligations Executive may have with prior employers or entities for which Executive has provided services. Executive has not entered into, and Executive agrees that Executive will not enter into, any agreement or obligation, either written or oral, in conflict herewith.

6. **TERMINATION OF EMPLOYMENT.** The Parties acknowledge that Executive's employment relationship with the Company is at-will. The provisions in this Section govern the amount of compensation, if any, to be provided to Executive upon termination of employment and do not alter this at-will status.

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6.1 **Termination by the Company Without Cause.**

(a) The Company shall have the right to terminate Executive's employment with the Company pursuant to this Section 6.1 at any time without "Cause" (as defined in Section 6.2(b) below) by giving notice as described in Section 7.1 of this Agreement. A termination pursuant to Sections 6.3 and 6.5 below is not a termination without "Cause" for purposes of receiving the benefits described in this Section 6.1.

(b) If the Company terminates Executive's employment at any time without Cause and provided that such termination constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h) a "**Separation from Service**"), then Executive shall be entitled to receive the Accrued Obligations (defined below) and, subject to Executive's compliance with the obligations in Section 6.1(c) below, then Executive shall also be entitled to receive (collectively, the "**Severance Benefits**");

(i) an amount equal to Executive's then current Base Salary for six (6) months (the "**Severance Period**"), less all applicable withholdings and deductions, paid in equal installments beginning on the Company's first regularly scheduled payroll date following the Release Effective Date (as defined in Section 6.1(c) below), with the remaining installments occurring on the Company's regularly scheduled payroll dates thereafter; and

(ii) payment of the employer portion of the premiums required to continue Executive's group health care coverage under the applicable provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985 ("**COBRA**"), provided that Executive timely elects to continue coverage under COBRA, until the earliest of (A) the close of the Severance Period, (B) the expiration of Executive's eligibility for the continuation coverage under COBRA, or (C) the date when Executive becomes eligible for substantially equivalent health insurance coverage in connection with new employment (such period from the termination date through the earliest of (A), (B) or (C), the "**COBRA Payment Period**"). Notwithstanding the foregoing, if at any time the Company determines in its sole discretion that the payment of the COBRA premiums would result in a violation of the nondiscrimination rules of Section 105(h)(2) of the Code or any statute or regulation of similar effect (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), then in lieu of providing the COBRA premiums, the Company will instead pay Executive on the last day of each remaining month of the COBRA Payment Period, a fully taxable cash payment equal to the COBRA premiums for that month, subject to applicable tax withholdings for the remainder of the COBRA Payment Period, regardless of whether Executive elects COBRA coverage (the "**Special Severance Payment**"). Executive may, but is not obligated to, use such Special Severance Payment toward the cost of COBRA premiums. If Executive becomes eligible for coverage under another employer's group health plan or otherwise ceases to be eligible for COBRA during the COBRA Payment Period, Executive must immediately notify the Company of such event, and all payments and obligations under this clause will cease.

(c) Executive will be paid all of the Accrued Obligations on the Company's first payroll date after Executive's date of termination from employment or earlier if required by law. Executive shall receive the Severance Benefits pursuant to Section 6.1(b) of this Agreement if: (i) Executive signs and delivers to the Company an effective, general release of claims in favor of the Company and its affiliates and representatives, in a form acceptable to the Company

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(the "**Release**"), by the 60th day following the termination date or such earlier date as set forth in the Release, which cannot be revoked in whole or part (if applicable) by such date or such earlier date as set forth in the Release (the date that the Release can no longer be revoked is referred to as the "**Release Effective Date**"); (ii) if Executive holds any other positions with the Company, Executive resigns such position(s) to be effective no later than the date of Executive's termination date (or such other date as requested by the Board); (iii) Executive returns all Company property; (iv) Executive complies with all post-termination obligations under this Agreement and the Confidential Information Agreement; and (v) Executive complies with the terms of the Release, including without limitation any non-disparagement and confidentiality provisions contained in the Release. To the extent that any Severance Benefits are deferred compensation under Section 409A of the Code, and are not otherwise exempt from the application of Section 409A, then, if the period during which Executive may consider and sign the Release spans two calendar years, the payment of Severance Benefits will not be made or begin until the later calendar year.

(d) For purposes of this Agreement, "**Accrued Obligations**" are (i) Executive's accrued but unpaid salary through the date of termination, (ii) any unreimbursed business expenses incurred by Executive payable in accordance with the Company's standard expense reimbursement policies, and (iii) benefits owed to Executive under any qualified retirement plan or health and welfare benefit plan in which Executive was a participant in accordance with applicable law and the provisions of such plan.

(e) The Severance Benefits provided to Executive pursuant to this Section 6.1 is in lieu of, and not in addition to, any benefits to which Executive may otherwise be entitled under any Company severance plan, policy or program.

(f) Any damages caused by the termination of Executive's employment without Cause would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.2 **Termination by the Company for Cause.**

(a) Subject to Section 6.2(c) below, the Company shall have the right to terminate Executive's employment with the Company at any time for Cause by giving notice as described in Section 7.1 of this Agreement.

(b) "**Cause**" for termination shall mean that the Company has determined in its sole discretion that the Executive has engaged in any of the following: (i) any material breach of the terms of this Agreement by Executive, or the willful failure of Executive to diligently and properly perform Executive's material duties for the Company; (ii) Executive's misappropriation or unauthorized use of the Company's tangible or intangible property that causes or is likely to cause material harm to the Company or its reputation, or material breach of the Confidential Information Agreement or any other similar agreement regarding confidentiality, intellectual property rights, non-competition or non-solicitation; (iii) any material failure to comply with the Company Policies or any other policies and/or directives of the Board; (iv) Executive's use of illegal drugs or any illegal substance, or Executive's use of alcohol in any manner that materially

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interferes with the performance of the Executive's duties under this Agreement; (v) any dishonest or illegal action (including, without limitation, embezzlement) or any other action, whether or not dishonest or illegal, by Executive which is materially detrimental to the interest and well-being of the Company, including, without limitation, harm to its reputation; (vi) Executive's failure to fully disclose any material conflict of interest the Executive may have with the Company in a transaction between the Company and any third party which is materially detrimental to the interest and well-being of the Company; (vii) any adverse action or omission by Executive which would be required to be disclosed pursuant to public securities laws or which would limit the ability of the Company or any entity affiliated with the Company to sell securities under any Federal or state law or which would disqualify the Company or any affiliated entity from any exemption otherwise available to it; or (viii) Executive's violation of the Company's Policies prohibiting unlawful harassment, discrimination, retaliation or workplace violence; *provided, however*, that prior to any termination of Executive for "Cause," if the grounds for such Cause are reasonably capable of cure by Executive, the Company shall provide Executive with written notice of the grounds for Cause and provide Executive with ten (10) business days in which to cure such Cause.

(c) In the event Executive's employment is terminated at any time for Cause, Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

6.3 **Resignation by Executive.**

(a) Executive may resign from Executive's employment with the Company at any time by giving notice as described in Section 7.1.

(b) In the event Executive resigns from Executive's employment with the Company for any reason (other than a resignation for Good Reason as described in Section 6.4 below), Executive will not receive Severance Benefits or any other severance compensation or benefits, except that, pursuant to the Company's standard payroll policies, the Company shall pay to

6.4 **Resignation by Executive for Good Reason.**

(a) Provided Executive has not previously been notified of the Company's intention to terminate Executive's employment, Executive may resign from employment with the Company for Good Reason (as defined in Section 6.4(b) below).

(b) "**Good Reason**" for resignation shall mean the occurrence of any of the following without Executive's prior consent: (i) a material diminution in Executive's authority, duties or responsibilities; (ii) a material diminution in Executive's Base Salary; (iii) a requirement that Executive report to an employee other than the CFO; (iv) the Company materially breaches its obligations under this Agreement; or (v) Executive's principal place of employment is relocated by more than fifty (50) miles from the Company's present location in Research Triangle Park, North Carolina. In addition to any requirements set forth above, in order for any of the above events to constitute "Good Reason," Executive must (X) inform the

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Company of the existence of the event within ninety (90) days of the initial existence of the event, after which date the Company shall have no less than thirty (30) days to cure the event which otherwise would constitute "Good Reason" hereunder and (Y) Executive must terminate his employment with the Company for such "Good Reason" no later than ninety (90) days after the initial existence of the event which prompted the Executive's termination. Any actions taken by the Company to accommodate a disability of Executive or pursuant to the Family and Medical Leave Act shall not be a Good Reason for purposes of this Agreement.

(c) In the event Executive resigns from Executive's employment for Good Reason, and provided that such termination constitutes a Separation from Service, then subject to Executive's compliance with the obligations in Section 6.1(c) above, Executive shall be eligible to receive the same Severance Benefits as described in Section 6.1 and on the same terms and conditions set forth in Section 6.1(c) and Section 6.1(e) as if Executive had been terminated by the Company without Cause.

(d) Any damages caused by the termination of Executive's employment for Good Reason would be difficult to ascertain; therefore, the Severance Benefits for which Executive is eligible pursuant to Section 6.1(b) above in exchange for the Release is agreed to by the Parties as liquidated damages, to serve as full compensation, and not a penalty.

6.5 **Termination by Virtue of Death, Disability of Executive, or Discontinuation of Business.**

(a) In the event of Executive's death while employed pursuant to this Agreement, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive's legal representatives all Accrued Obligations.

(b) Subject to applicable state and federal law, the Company shall at all times have the right, upon written notice to Executive, to terminate this Agreement based on Executive's Disability. Termination by the Company of Executive's employment based on "**Disability**" shall mean termination because a qualified medical doctor mutually acceptable to the Company and Executive or Executive's personal representative has certified in writing that: (A) Executive is unable, because of a medically determinable physical or mental disability, to perform the essential functions of Executive's job, with or without a reasonable accommodation, for more than one hundred and eighty (180) calendar days measured from the last full day of work; or (B) by reason of mental or physical disability, it is unlikely that Executive will be able, within one hundred and eighty (180) calendar days, to resume the essential functions of Executive's job, with or without a reasonable accommodation, and to otherwise discharge the Executive's duties under this Agreement. This definition shall be interpreted and applied consistent with the Americans with Disabilities Act, the Family and Medical Leave Act, and other applicable law. In the event Executive's employment is terminated based on Executive's Disability, Executive will not receive Severance Benefits or any other severance compensation or benefit, except that, pursuant to the Company's standard payroll policies, the Company shall pay to Executive the Accrued Obligations.

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(c) In the event the Company's business is discontinued because rendered impracticable by substantial financial losses, lack of funding, legal decisions, administrative rulings, declaration of war, dissolution, national or local economic depression or crisis or any reasons beyond the control of the Company, all obligations of the Parties hereunder shall terminate immediately, and the Company shall, pursuant to the Company's standard payroll policies, pay to Executive or his legal representatives all Accrued Obligations.

6.6 **Cooperation With Company After Termination of Employment.** Following termination of Executive's employment for any reason and for a period of two years thereafter, Executive agrees to cooperate (a) with the Company in (i) the defense of any legal matter involving any matter that arose during Executive's employment with the Company, and (ii) all matters relating to the winding up of Executive's pending work and the orderly transfer of any such pending work to such other employees as may be designated by the Company; and (b) with all government authorities on matters pertaining to any investigation, litigation or administrative proceeding pertaining to the Company. The Company will reimburse Executive for any reasonable travel and out of pocket expenses incurred by Executive in providing such cooperation. The Company will also pay Executive a per diem of \$937 or each day or partial day that Executive devotes to fulfilling his obligation to cooperate under this Section 6.6, unless Executive is then receiving continued payment of his Base Salary under 6.1(b)(i), above.

6.7 **Application of Section 409A.**

(a) It is intended that all of the severance payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively, "**Section 409A**") provided under Treasury Regulations Sections 1.409A-1(b)(4) and 1.409A-1(b)(9), and this Agreement will be construed in a manner that complies with Section 409A. If not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A, and incorporates by reference all required definitions and payment terms.

(b) The preceding provisions shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. The Company shall not be liable to Executive for any payment made under this Agreement which is determined to result in an additional tax, penalty or interest under Section 409A, nor for reporting in good faith any payment as an amount includible in gross income under Section 409A.

(c) No severance payments will be made under this Agreement unless Executive's termination of employment constitutes a "separation from service" (as defined under Treasury Regulation Section 1.409A-1(h)).

(d) For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulations Section 1.409A-2(b)(2)(iii)), Executive's right to receive any installment payments under this Agreement (whether severance payments or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment.

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(e) If the Company determines that the severance benefits provided under this Agreement constitutes "deferred compensation" under Section 409A and if Executive is a "specified employee" of the Company, as such term is defined in Section 409A(a)(2)(B)(i) of the Code at the time of Executive's Separation from Service, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance Benefits will be delayed as follows: on the earlier to occur of (i) the date that is six months and one day after Executive's Separation from Service, and (ii) the date of Executive's death (such earlier date, the "**Delayed Initial Payment Date**"), the Company will (1) pay to Executive a lump sum amount equal to the sum of the Severance Benefits that Executive would otherwise have received through the Delayed Initial Payment Date if the commencement of the payment of the Severance Benefits had not been delayed pursuant to this Section 6.7, and (2) commence paying the balance of the Severance in accordance with the applicable payment schedule set forth in Section 6.1. No interest shall be due on any amounts deferred pursuant to this Section 6.7.

7. **GENERAL PROVISIONS.**

7.1 **Notices.** Any notices required hereunder to be in writing shall be deemed effectively given: (a) upon personal delivery to the Party to be notified, (b) when sent by electronic mail or confirmed facsimile if sent during normal business hours of the recipient, and if not, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All

communications shall be sent to the Company at its primary office location and to Executive at Executive's address as listed on the Company payroll, or at such other address as the Company or Executive may designate by ten (10) days advance written notice to the other.

7.2 **Severability.** Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provisions had never been contained herein.

7.3 **Survival.** Provisions of this Agreement which by their terms must survive the termination of this Agreement in order to effectuate the intent of the Parties will survive any such termination, whether by expiration of the term, termination of Executive's employment, or otherwise, for such period as may be appropriate under the circumstances.

7.4 **Waiver.** If either Party should waive any breach of any provisions of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

7.5 **Complete Agreement.** This Agreement constitutes the entire agreement between Executive and the Company with regard to the subject matter hereof. This Agreement is the complete, final, and exclusive embodiment of their agreement with regard to this subject matter

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and supersedes any prior oral discussions or written communications and agreements, including the Prior Agreement. This Agreement is entered into without reliance on any promise or representation other than those expressly contained herein, and it cannot be modified or amended except in writing signed by Executive and an authorized officer of the Company. The Parties have entered into a separate Confidential Information Agreement and have entered or may enter into separate agreements related to equity. These separate agreements govern other aspects of the relationship between the Parties, have or may have provisions that survive termination of Executive's employment under this Agreement, may be amended or superseded by the Parties without regard to this Agreement and are enforceable according to their terms without regard to the enforcement provision of this Agreement.

7.6 **Headings.** The headings of the sections hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

7.7 **Successors and Assigns.** The Company shall assign this Agreement and its rights and obligations hereunder in whole, but not in part, to any company or other entity with or into which the Company may hereafter merge or consolidate or to which the Company may transfer all or substantially all of its assets, if in any such case said Company or other entity shall by operation of law or expressly in writing assume all obligations of the Company hereunder as fully as if it had been originally made a Party, but may not otherwise assign this Agreement or its rights and obligations hereunder. The Executive may not assign or transfer this Agreement or any rights or obligations hereunder, other than to Executive's estate upon death.

7.8 **Withholding.** All amounts payable hereunder shall be subject to applicable tax withholding.

7.9 **Choice of Law.** This Agreement in all respects shall be governed by and interpreted in accordance with the laws of the State of North Carolina, both procedural and substantive, without regard to conflicts of law, except to the extent that federal laws and regulations preempt otherwise applicable law.

7.10 **Mandatory Mediation.** Prior to and as a condition of either Party's filing suit in state or federal court, the Parties shall engage in a mediated settlement conference in accordance with the North Carolina Superior Court Rules Implementing Statewide Mediation. The Parties shall mediate in good faith until settlement is reached or an impasse is declared by the mediator.

7.11 **Jurisdiction.** Each Party hereby irrevocably submits to the exclusive jurisdiction of the United States District Court located in Wake County, North Carolina, or any state court located within such state, in respect of any claim relating to this Agreement or Executive's employment with the Company, and hereby waives, and agrees not to assert, as a defense in any action, suit or proceeding in which any such claim is made that said Party is not subject thereto or that such action, suit or proceeding may not be brought or is not maintainable in such courts or that the venue thereof may not be appropriate or that this Agreement may not be enforced in or by such courts. Any appellate proceedings shall take place in the appropriate courts having appellate jurisdiction over the courts set forth in this Section.

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7.12 **Counterparts.** This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one Party, but all of which taken together will constitute one and the same Agreement. Facsimile signatures and signatures transmitted by PDF shall be equivalent to original signatures.

[SIGNATURES TO FOLLOW ON NEXT PAGE]

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IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first written above.

LIQUIDIA TECHNOLOGIES, INC.

By: /s/ Kevin K. Gordon
Name: Kevin K. Gordon
Title: President and CFO

Executive:

/s/ Tim Albury
Tim Albury

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Exhibit A

CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

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CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT

THIS CONFIDENTIALITY, INVENTIONS AND NON-COMPETITION AGREEMENT (this “**Agreement**”) is effective as of DATE (the “**Effective Date**”) by and between NAME (hereinafter “**Employee**”) and Liquidia Technologies, Inc. (the “**Company**”).

STATEMENT OF PURPOSE

The Employee desires to be employed by the Company, and the Company is willing to employ Employee strictly subject to Employee’s agreement to be bound by the terms of this Agreement.

IN CONSIDERATION of the Company’s employment of the Employee and the compensation and other benefits that the Company may provide to Employee as an employee, the Employee, intending to be legally bound, agrees to the following:

1. For purposes of this Agreement, “**Proprietary Information**” is information (whether in written or other form or whether or not patentable or protectable by copyright, trade secret, trade dress, trademark, or the like) that: (i) has been created, invented, discovered, or developed by the Employee in connection with the Employee’s employment by the Company; (ii) is non-public and has been disclosed, furnished, or communicated to the Employee in connection with the Employee’s employment by the Company; or (iii) is non-public and the unauthorized disclosure of which could be detrimental to the interests of the Company. Proprietary Information includes, but is not limited to, all inventions, works of authorship, trade secrets, know how, proprietary or confidential information, including, but not limited to, research, product or business plans, products, services, projects, proposals, processes, formulas, ideas, data, compositions, technology, computer programs and related source code and object code, developments, designs, drawings, marketing information and plans, customer lists, budgets, projections, partners, cost analyses, acquisition candidates, relevant parts of analysis, reviews, compilations, studies or other records and documents, and other information owned by the Company, disclosed to the Employee, or to which the Employee has been provided access or gains access, either directly or indirectly, by any means. Proprietary Information does not include information that is or becomes generally available to the public other than as a result of a disclosure by the Employee or by any other person or entity that is under a confidentiality obligation to Company with respect to such information.

2. Nondisclosure of Proprietary Information.

2.1 The Employee acknowledges and agrees that Proprietary Information is the sole property of the Company or its designee and that the Employee shall have no right,

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title, license, or interest in or to any Proprietary Information. During and after the Employee’s employment by the Company, the Employee shall keep in the strictest confidence and trust all Proprietary Information and shall not directly or indirectly disclose, distribute, copy, supply, or use, in whole or in part, any Proprietary Information except as approved in advance in writing by the Company. Notwithstanding the foregoing, it is understood that, at all such times, the Employee is free (i) to use information which was known to the Employee prior to employment with the Company or which is generally known in the trade or industry through no breach of this Agreement or other act or omission by the Employee, (ii) to discuss the terms of the Employee’s employment, wages and working conditions to the extent expressly protected by applicable law, (iii) to report possible violations of federal securities laws to the appropriate government enforcing agency and make such other disclosures that are expressly protected under such laws, (iv) to respond to inquiries from, or otherwise cooperate with, any governmental or regulatory investigation, or (v) to testify truthfully as compelled by lawful process or subpoena related to such testimony after the Employee has provided advance written notice of said subpoena to the Company’s Chief Executive Officer and reasonably cooperates with the Company in any process to oppose said subpoena.

2.2 The Employee shall not use or disclose to the Company, or assist in the disclosure to the Company of, proprietary or confidential information belonging to any third parties, including any prior employer(s).

2.3 The Employee acknowledges and agrees that the Company has received and in the future may receive from third parties, including, but not limited to, potential collaborating partners or customers of the Company, confidential or proprietary information (“**Third Party Information**”) 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. During the term of the Employee’s employment with the Company and thereafter, the Employee will hold Third Party Information in the strictest confidence and will not disclose to anyone (other than Company personnel or the Company’s designee who need to know such information in connection with their work for the Company or such third party) or use Third Party Information, except in connection with the Employee’s work for the Company or such third party, unless expressly approved in advance in writing by the Company. The Employee further agrees to be bound by and subject to any confidentiality or nondisclosure agreements or clauses with respect to such Third Party Information between the Company and any such third party.

2.4 Pursuant to the Defend Trade Secrets Act of 2016, the Employee acknowledges that the Employee will not have criminal or civil liability under any federal or state trade secret law for the disclosure of a trade secret that (i) is made (a) in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney and (b) solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. In addition, if the Employee files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Employee may

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disclose the trade secret to the Employee’s attorney and may use the trade secret information in the court proceeding, if the Employee (x) files any document containing the trade secret under seal and (y) does not disclose the trade secret, except pursuant to court order.

3. Upon the earliest to occur of (i) termination of the Employee’s employment by the Company for any reason, (ii) termination of the Employee’s access to Proprietary Information, or (iii) the request of the Company, the Employee shall return to the Company (and will not keep in Employee’s possession or control or deliver to anyone else) all materials belonging to the Company, whether kept at the Employee’s business office, personal residence or otherwise, including, but not limited to, all materials containing or relating to any Proprietary Information in any written, tangible, electronic or other form that the Employee may have in Employee’s possession or control, and any and all mobile telephones, personal digital assistants, pagers, computer and other electronic devices and credit cards. After returning the materials and equipment described in the preceding sentence to the Company, the Employee shall not retain any copies of any such materials.

4. Ownership of Proprietary Information.

4.1 All Proprietary Information and other information, which by its nature is proprietary to the Company, relating to the Company’s business or the Company’s anticipated business, or based on, derived from or relating to any Proprietary Information (collectively, Proprietary Information and “**Work Product**”) shall be the sole property of the Company. The Employee agrees that all Proprietary Information and Work Product created, conceived, reduced to practice, made or otherwise developed by the Employee, solely or jointly, during and in any way related to the Employee’s employment, shall be the exclusive property of the Company and/or its designees or assignees, and shall be deemed “works made for hire,” as that term is defined in Section 101 of the U.S. Copyright Act of 1976, as amended.

4.2 If, for any reason, any Proprietary Information and Work Product does not qualify as works made for hire, the Employee shall assign and does hereby irrevocably, unconditionally, and without encumbrance of any kind assign to the Company, and forever waives and agrees never to assert, all right, title, and interest, including without limitation, all patent, trademark, copyright, trade secret, and other intellectual property (collectively, “**Intellectual Property**”) rights, in and to such Proprietary Information and Work Product. The Employee shall assist the Company, or its designee, in every proper way to secure the Company’s rights in the Proprietary Information and Work Product and any Intellectual Property rights relating thereto in any and all countries, including (i) the disclosure to the Company of all pertinent information and data with respect thereto, (ii) the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company or its designee the sole and exclusive right, title and interest in and to the Proprietary Information and Work Product, and (iii) the defense of any claim, demand, action, litigation, suit, or other proceeding.

including, but not limited to, interference, cancellation, opposition, or other proceedings in respect of such applications or any registrations or patents issuing therefrom. The Employee shall continue such assistance after the termination of the Employee's employment by the Company.

4.3 During the Employee's employment by the Company, the Employee shall report promptly to the Company all Proprietary Information and Work Product created, conceived, reduced to practice, or otherwise developed by the Employee, solely or jointly.

4.4 If the Company is unable because of the Employee's mental or physical incapacity or for any other reason to secure the Employee's signature to apply for or to secure protection of any Proprietary Information and Work Product, then the Employee hereby designates and appoints the Company and its duly authorized officers and agents as its agents and attorneys-in-fact to execute and file any certificates, applications or documents and to do all of their lawful acts necessary to perfect and protect the Company's rights in the Proprietary Information and Work Product. The Employee expressly acknowledges that the foregoing power of attorney is coupled with an interest and is therefore irrevocable and shall survive the Employee's death or incompetency and the termination of the Employee's employment or engagement by the Company.

4.5 The Employee hereby represents and warrants that the Employee has fully disclosed to the Company on Schedule A attached hereto any idea, invention, discovery or process relating to the Company's business which, prior to the Employee's employment with the Company, the Employee conceived, reduced to practice, or developed, individually or jointly, and is to be excluded from the scope of this Agreement.

4.6 Notwithstanding anything in this Agreement to the contrary, the obligation of the Employee to assign or offer to assign the Employee's rights in an invention to the Company shall not extend or apply to an invention that the undersigned developed (i) entirely on the Employee's own time; (ii) without using Company equipment, supplies, facilities, or other resources, Proprietary Information or trade secret information unless such invention (a) relates to the Company's business or actual or demonstrably anticipated research or development, or (b) results from any work performed by the Employee for the Company. The Employee shall bear the burden of proof in establishing that the Employee's invention qualifies for exclusion under this Section 4.6.

5. Covenant Not To Compete.

5.1 For purposes of Part 5 of this Agreement, including each of its subparts, the following terms shall have the following meanings:

a. "**Competing Business**" shall mean any corporation, partnership, person, or other entity that is researching, developing, manufacturing, marketing, distributing, or selling any product, service, or technology that is competitive with any part of the Company's Business.

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b. The "**Company's Business**" shall mean the development, manufacture, marketing, distribution, or sale of, including research directed to, any product, service, or technology that the Company is developing, manufacturing, marketing, distributing, or selling or to which the Company directed research at any time during Employee's employment with the Company. As of the date of this Agreement, the Company's Business includes, but is not limited to, research directed to and the development, manufacture, marketing, distribution, and/or sale of: (i) isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled pharmaceutical or therapeutic particles fabricated from a mold; (ii) size and/or shape controllable pharmaceutical or therapeutic particles molded using a polymer or low surface energy mold; (iii) film based products of or containing arrays of size and/or shape controlled structures molded from a low surface energy mold; (iv) isolated nano or micro size and/or shape controlled particles fabricated from a mold, including products of or containing the isolated size and/or shape controlled particles fabricated from a mold; (v) nano or micro size and/or shape controllable particles molded using a polymer or low surface energy mold; or (vi) patterned drum fabrication and mold for manufacturing the products of (i)-(v) above. The Employee understands that during the Employee's employment with the Company, the Company's Business may expand or change, and the Employee agrees that any such expansions or changes shall expand or contract the definition of the Company's Business and the Employee's obligations under this Agreement accordingly.

c. "**Territory**" shall mean the following severable geographic areas: (i) the world, (ii) any country in which the Company or a Competing Business is engaged in business, (iii) any country in which the Company is engaged in business, (iv) the United States, Europe, and Asia, (v) the United States, (vi) any state, including the District of Columbia, in which the Company or a Competing Business is engaged in business, (vii) any state, including the District of Columbia, in which the Company is engaged in business, (viii) North Carolina, (ix) a one hundred mile radius of the Employee's principal place of employment or work for the Company, or (x) a one hundred mile radius of the Company's corporate headquarters.

5.2 It is recognized and understood by the Employee that, through the Employee's association with the Company, the Employee shall: (i) have access to trade secrets and confidential information of the Company, including, but not limited to, valuable information about its intellectual property, business operations and methods, and the persons with which it does business in various locations throughout the world, that is not generally known to or readily ascertainable by the Company's competitors, (ii) develop relationships with the Company's customers and others with which the Company does business, and these relationships are among the Company's most important assets, (iii) receive specialized knowledge of and specialized training in the Company's Business, and (iv) gain such knowledge of the Company's Business that, during the course of the Employee's employment with the Company and for a period of one year following the termination thereof, the Employee could not perform services for a Competing Business

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without inevitably disclosing the Company's trade secrets and Proprietary Information to that Competing Business.

5.3 While employed by the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise) for any Competing Business, (ii) engage in any activities (or assist others to engage in any activities) that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing or prospective customers, suppliers, business partners, or contractors of the Company to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, or (v) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company.

5.4 For a period of one year following the termination of the Employee's employment with the Company, the Employee will not, without the express written consent of an authorized representative of the Company: (i) perform services (as an employee, independent contractor, officer, director, or otherwise), within the Territory for any Competing Business, that are the same or substantially similar to any services that the Employee performed for the Company or that otherwise utilize skills, knowledge, and/or business contacts and/or relationships that the Employee developed while providing services to the Company, (ii) engage in any activities (or assist others to engage in any activities) within the Territory that compete with the Company's Business, (iii) own or beneficially own an equity interest in a Competing Business, (iv) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or any prospective customers to whom the Company has made a written proposal ("Prospective Customers"), suppliers, business partners, or contractors of the Company, during the last year of the Employee's employment with the Company, to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, (v) request, induce, or solicit (or assist others to request, induce, or solicit) any existing customer or Prospective Customers, suppliers, business partners, or contractors of the Company with which the Employee worked or had business contact during the last year of the Employee's employment with the Company to curtail or cancel their business with the Company or to do business within the scope of the Company's Business with a Competing Business, or (vi) request, induce, or solicit (or assist others to request, induce, or solicit) any employee of the Company to terminate his or her employment with the Company. Where a Competing Business is a large enterprise with separately operated business units, the restrictions in Section 5.4(i) shall not apply to any such business unit that has no involvement in the research, development, manufacture, marketing, distribution, or sale of a product, service, or technology that is competitive with any part of the Company's Business; *provided, however*, that this sentence does not apply to any employees in a scientific role or whose role involves the research, development or maintenance of the Company's trade secrets. These obligations will continue for the specified period regardless of whether the termination of the Employee's

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employment was voluntary or involuntary or with or without cause, and the specified period shall be tolled and shall not run during any time in which the Employee fails to abide by this obligations.

5.5 The Employee shall not at any time following the termination of the Employee's employment with the Company use the name or trading style of the Company in any country, or use in any country any name or trading style which is the same as or similar to any of the trade or service marks of the Company or any brand name or proposed brand name of any of the Company's products or proposed products, or represent himself or herself as carrying on or continuing or being connected with the Company or its business for any purpose whatsoever unless otherwise agreed by the Company in writing.

5.6 While employed by the Company, the Employee shall disclose to the audit committee of the Company the Employee's interest in respect of any contract or arrangement in which the Employee has any personal material interest, directly or indirectly, or any conflicts of interest (including the conflict of interest that may arise from the Employee's directorship(s) or executive position or personal investments in any corporation(s)) that may involve the Employee. Upon such disclosure, the Employee shall abstain from voting in respect of any such contract, arrangement, proposal, transaction, or matter in which the conflict of interest arises, unless and until the audit committee has determined that no such conflict of interest exists.

5.7 As an exception to the restrictions set forth in Parts 5.3 and 5.4 herein, the Employee may own passive investments in a Competing Businesses, (including, but not limited to, indirect investments through mutual funds), provided that the securities of the Competing Business are publicly traded and the Employee does not own or control more than two percent of the outstanding voting rights or equity of the Competing Business.

5.8 In the event that a court determines that the length of time, the geographic area, or the activities prohibited under this Agreement are too restrictive to be enforceable, the Court may reduce the scope of the restriction to the extent necessary to make the restriction enforceable.

5.9 The market for the Company's services and the Company's Business is highly specialized and highly competitive such that other companies and business entities compete with the Company in various locations throughout the world. The provisions set forth in this Agreement: (i) are reasonably necessary to protect the Company's legitimate business interests, (ii) are reasonable as to the time, territory, and scope of activities that are restricted, (iii) do not interfere with the Employee's ability to earn a comparable living or secure employment in the field of the Employee's choice, (iv) do not interfere and are not inconsistent with public policy or the public interest, and (v) are described with sufficient accuracy and definiteness to enable the Employee to understand the scope of the restrictions on the Employee.

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5.10 Because of the unique nature of the Proprietary Information, the Employee understands and agrees that the Company will suffer irreparable harm in the event that the Employee fails to comply with any of the Employee's obligations under this Agreement and that monetary damages will be inadequate to compensate the Company for such breach. Accordingly, the Employee agrees that the Company will, in addition to any other remedies available to it at law or in equity, be entitled to injunctive relief to enforce the terms of this Agreement.

6. The Employee hereby authorizes the Company to provide a copy of this Agreement, including any exhibits hereto, to any and all of the Employee's future employers and to notify any and all such future employers that the Company intends to exercise its legal rights arising out of or in connection with this Agreement and/or any breach or any inducement of a breach hereof.

7. The Employee agrees that, during the term of the Employee's employment with the Company, the Employee will not: (i) engage in any other employment, occupation, consulting, or other business activity that conflicts with the Employee's obligations to the Company, or (ii) engage in any other activities that conflict with the Employee's obligations to the Company.

8. Debarment Certification

8.1 The Employee represents and promises that Employee:

- (a) is not presently, and during the Employee's employment will not be, debarred or convicted for a crime for which Employee can be debarred under the Generic Drug Enforcement Act of 1992 (21USC335a)(the "Act"); and
- (b) is not presently, and during the Employee's employment will not be, indicted or otherwise criminally or civilly charged by a government entity (Federal or State) with commission of the kinds of conduct for which Employee can be debarred under the Act; and
- (c) will not employ or otherwise engage any individual who has been (i) debarred or (ii) convicted of a crime for which a person can be debarred under the Act, in any capacity in connection with the activities of developing or reporting data which may become part of an application for approval of a drug or biologic.

8.2 The Employee promises that, during the Employee's employment with the Company, the Employee will promptly notify the Company upon learning of or having a belief that the Employee cannot satisfy the obligations of Section 8.1 above.

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9. The Employee agrees that this Agreement shall be enforced, construed and interpreted under the law of the state of North Carolina, without regard to the conflicts of laws principles thereof. The state and federal courts in North Carolina shall be the exclusive venues for the adjudication of all disputes arising out of this Agreement, and the Employee consents to the exercise of personal jurisdiction over the Employee in any such adjudication and hereby waives any and all objections and defenses to the exercise of such personal jurisdiction.

10. The Employee agrees that: (i) the Employee's employment relationship with the Company is "at-will," which means that either the Employee or the Company can terminate the relationship at any time for any reason or no reason, with or without notice, unless the Employee and the Company are parties to a contract that expressly provides a fixed term of employment, (ii) the Employee's employment relationship with the Company is contingent upon the Employee's execution of this Agreement, which is a material inducement to the Company to offer the employment relationship to the Employee and to provide Proprietary Information to the Employee, and (iii) this Agreement shall survive any termination for any reason whatsoever of the Employee's employment relationship with the Company.

11. The Employee agrees that the Company's failure to insist upon strict compliance with any provision of this Agreement shall not be deemed a waiver of such provision or of any other provision in the Agreement. The provisions of this Agreement shall be enforceable, notwithstanding the existence of any breach of this Agreement by the Company or of any claim by the Employee against the Company, whether predicated on this Agreement or otherwise.

12. This Agreement contains the entire understanding between the parties with respect to the subject matter hereof and supersedes all prior or contemporary agreements or understandings, whether written or oral, with respect thereto, provided, however, prior to the execution of this Agreement, if Company and the Employee were parties to any agreement regarding the subject matter hereof, that agreement will be superseded by this Agreement prospectively only. This Agreement may not be modified or amended except by an agreement in writing signed by both parties.

13. The Employee agrees that this Agreement is assignable by the Company at the Company's discretion and the Employee authorizes the Company's successors and assigns to enforce this Agreement for their respective benefits.

14. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

15. The Employee agrees that a breach of any provision(s) of this Agreement will toll the running of the limitation period with respect to such provision(s) for as long as such breach occurs.

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16. The Employee agrees and acknowledges that the Company's agreement to employ the Employee, in and of itself, is sufficient and adequate consideration for the Employee's promises and obligations hereunder, and that the compensation and other benefits that the Company provides the Employee during the course of the Employee's employment are, independently

and collectively, sufficient and adequate consideration for the Employee's promises and obligations hereunder.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Employee has executed this Agreement to be effective as of the date set forth above.

LIQUIDIA TECHNOLOGIES, INC.

By: _____ (s)
Name:
Title:

NAME

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SCHEDULE A

The following items are inventions, ideas, computer software programs or other equipment or technology not covered by Section 4 of this Agreement, which the undersigned conceived of or developed, wholly or in part, prior to the Employee's employment or engagement with the Company and shall be excluded from the scope of this Agreement.

If the undersigned has no such items to disclose, write "NONE" on this line: .

Description of Items: (if applicable)

Title on Document	Date on Document	Name of Witness on Document

LIQUIDIA TECHNOLOGIES, INC.

By: _____

NAME _____

Dated: _____

Dated: _____

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