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As confidentially submitted to the Securities and Exchange Commission on March 30, 2017 as Amendment No. 3 to the confidential submission File No. 377-01157

Registration No. 333-

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

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

KALA PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**2834**	**27-0604595**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

100 Beaver Street, Suite 201
Waltham, MA 02453
(781) 996-5252
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mark Iwicki
Chief Executive Officer
Kala Pharmaceuticals, Inc.
100 Beaver Street, Suite 201
Waltham, MA 02453
(781) 996-5252
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to public:
As soon as practicable after this Registration Statement is declared effective.

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

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

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

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

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

Large accelerated filer o	Accelerated filer o	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities	**Proposed Maximum**	**Amount of**

to Be Registered	Aggregate Offering Price(1)	Registration Fee(2)
Common Stock, $0.001 par value per share	$	$

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

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.

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

SUBJECT TO COMPLETION, DATED , 2017

PROSPECTUS

Shares

Common Stock

This is an initial public offering of common stock by Kala Pharmaceuticals, Inc. We are selling shares of common stock. The estimated initial public offering price is between $ and $ per share.

Prior to this offering, there has been no public market for our common stock. We intend to apply to list our common stock on the NASDAQ Global Market under the symbol "KALA."

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

	Per share	Total
Initial public offering price	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds to Kala, before expenses	$	$

(1) We have agreed to reimburse the underwriters for certain FINRA-related expenses. See "Underwriting" on page 174.

We have granted the underwriters the right to purchase up to an additional shares of common stock. The underwriters may exercise this right at any time within 30 days after the date of this prospectus.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 11 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about , 2017.

J.P. Morgan **BofA Merrill Lynch**

Wells Fargo Securities

Wedbush PacGrow

, 2017

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Neither we nor the underwriters have authorized anyone to provide you with any information other than that contained in this prospectus, any amendment or supplement to this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

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

We own or have rights to trademarks, service marks and trade names that we use in connection with the operation of our business, including our corporate name, logos and website names. Other trademarks, service marks and trade names appearing in this prospectus are the property of their respective owners. The service marks and trademarks that we own include Kala® and Kala™. Solely for convenience, some of the trademarks, service marks and trade names referred to in this prospectus are listed without the ® and ™ symbols, but we will assert, to the fullest extent under applicable law, our rights to our trademarks, service marks and trade names.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes appearing at the end of this prospectus, before making an investment decision. Unless the context otherwise requires, references in this prospectus to "Kala," "the Company," "we," "us" and "our" refer to Kala Pharmaceuticals, Inc.

Overview

We are a biopharmaceutical company focused on the development and commercialization of therapeutics using our proprietary nanoparticle-based Mucus Penetrating Particles, or MPP, technology, with an initial focus on the treatment of eye diseases. Our MPPs are selectively-sized nanoparticles and have proprietary coatings. We believe that these two key attributes enable even distribution of drug particles on mucosal surfaces and significantly increase drug delivery to target tissues by enhancing mobility of drug particles through mucus and preventing drug particles from becoming trapped and eliminated by mucus. KPI-121, our lead program, consists of topically applied MPP nanosuspensions of loteprednol etabonate, or LE, a corticosteroid designed for ocular applications. Under our KPI-121 program, we have two product candidates in Phase 3 clinical development, one for the treatment of inflammation and pain following ocular surgery and one for the temporary relief of the signs and symptoms of dry eye disease. We anticipate filing new drug applications, or NDAs, for these KPI-121 product candidates by the end of 2017 and the first half of 2018, respectively.

We have completed a Phase 3 clinical trial of KPI-121 1.0%, our twice-a-day product candidate, in patients with inflammation and pain following cataract surgery, which is the most common type of ocular surgery in the United States. Commonly used topical ocular corticosteroid products for the treatment of post-operative inflammation and pain are approved for dosing four times a day. In June 2016, we initiated a second Phase 3 clinical trial of KPI-121 1.0%, and we have completed the enrollment phase with 520 patients enrolled. We expect to receive topline results of this clinical trial in the second quarter of 2017. Assuming positive results from this Phase 3 clinical trial, we anticipate filing an NDA for the approval of KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery by the end of 2017. KPI-121 0.25% is our product candidate for patients with dry eye disease utilizing a two-week course of therapy. After achieving positive results in a Phase 2 clinical trial, we initiated two parallel Phase 3 clinical trials of KPI-121 0.25% in June 2016. Each of these Phase 3 clinical trials has a target enrollment of at least 900 dry eye patients and had enrolled over 500 dry eye patients as of March 15, 2017. We expect to receive topline results from these clinical trials by the end of 2017. Assuming positive results from these Phase 3 clinical trials, we anticipate filing an NDA for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018. We also are evaluating compounds in our topically applied MPP receptor Tyrosine Kinase Inhibitor program, or rTKI program, that inhibit the vascular endothelial growth factor, or VEGF, pathway, for the potential treatment of a number of retinal diseases.

For both KPI-121 product candidates, we plan to rely on the potentially more expeditious pathway to U.S. Food and Drug Administration, or the FDA, approval under Section 505(b)(2) of the U.S. Federal Food, Drug and Cosmetic Act, or the FDCA. Based on our discussions with European Union, or EU, regulatory authorities, if the results of our ongoing Phase 3 dry eye disease trials are positive, we believe that we will be able to utilize the results from these trials to support a submission of a Marketing Authorization Application, or MAA, for KPI-121 0.25% for the short-term treatment of dry eye disease in the EU through the Article 10(3) submission pathway.

We have retained worldwide commercial rights for our current product candidates. If our current product candidates receive marketing approval, we expect to commercialize them in the United States with our own focused, specialty sales force of approximately 150 sales and marketing personnel that will call on ophthalmologists and optometrists. We are evaluating a variety of collaboration, distribution and other marketing arrangements with one or more third parties for the EU market.

We own and/or exclusively license patents relating to our product candidates and MPP technology. The earliest expiration date of an issued U.S. patent covering our current product candidates is in 2033. The earliest expiration date of an issued U.S. patent relating to our MPP technology is in 2027.

Our Product Candidates

The following table describes the development stage of each of our current development programs:

Indication	Preclinical	Phase 1	Phase 2	Phase 3	Expected Milestones and Planned Next Steps
Treatment of post-operative inflammation and pain following ocular surgery	KPI-121 1.0% **1st Phase 3 trial complete** **2nd Phase 3 trial ongoing**				▪ Complete 2nd Phase 3 trial in 2Q of 2017 ▪ Submit NDA by end of 2017
Temporary relief of the signs and symptoms of dry eye disease	KPI-121 0.25% **Two parallel Phase 3 trials ongoing**				▪ Complete parallel Phase 3 trials in 2H of 2017 ▪ Submit NDA in 1H of 2018
Retinal diseases	rTKI Program **Lead compound selected**				▪ Complete evaluation of our lead compound, KPI-285, for Wet AMD

KPI-121 1.0% for Post-Operative Inflammation and Pain. Ocular inflammation and pain are common complications following ocular surgery. According to Marketscope, a third-party provider of market data, in 2016 there were 3.9 million cataract surgeries, which represent the majority of the 7.7 million ocular surgeries in the United States. Other commonly performed ocular surgeries include strabismus, vitreoretinal, cornea and glaucoma procedures. Tissue damage caused by ocular surgery leads to the production of prostaglandins and an increase in blood flow to the affected area, which contribute to inflammation. The standard of care for post-operative inflammation and pain includes anti-inflammatory drugs such as corticosteroids, which improve patient comfort and accelerate recovery through disruption of the inflammatory cascade. The current four times a day dosing regimen for treatment can be burdensome for patients as they are taking multiple eye drop products following surgery, and is believed to reduce patient compliance. There are no ocular corticosteroid products currently approved in the United States for dosing two times a day for the treatment of post-operative inflammation and pain.

KPI-121 1.0%, our twice-a-day product candidate for the treatment of inflammation and pain following ocular surgery, is currently in Phase 3 clinical development. We believe that KPI-121 1.0% has a favorable profile for the treatment of inflammation and pain following ocular surgery, due to its twice-a-day dosing regimen, rapid onset of relief and favorable safety and tolerability profile. Based on a survey we commissioned of 73 ophthalmologists and optometrists, which we refer to as our clinician survey, we believe these features of KPI-121 1.0% will be attractive to prescribing clinicians. Surveyed clinicians indicated they would consider using KPI-121 1.0% to treat approximately 33% of their post-operative patients.

In our first successfully completed Phase 3 clinical trial of KPI-121 1.0% in patients who had undergone cataract surgery, administration of KPI-121 1.0% two times a day for 14 days achieved statistical significance for both primary efficacy endpoints of complete resolution of inflammation at day eight maintained through day 15 with no need for rescue medication (p=0.0024) and complete resolution of pain at day eight maintained through day 15 with no need for rescue medication (p=0.0019). KPI-121 1.0% was well tolerated with no increases in intraocular pressure, or IOP, a common side effect of steroids, compared to placebo. In June 2016, we initiated enrollment in a second Phase 3 clinical trial of KPI-121 1.0% in patients who had undergone cataract surgery and have completed the enrollment phase of the trial with 520 patients enrolled. We are comparing KPI-121 1.0% to placebo, both administered two times a day for 14 days in this trial. The key trial design elements of this second Phase 3 clinical trial are substantially similar to the first completed Phase 3 trial, including the same primary efficacy endpoints.

KPI-121 0.25% for Dry Eye Disease. Dry eye disease is a chronic, episodic, multifactorial disease affecting the tears and ocular surface that can result in tear film instability, inflammation, discomfort, visual disturbance and ocular surface damage. Dry eye disease can have a significant impact on quality of life and can potentially cause long-term damage to the ocular surface. In addition, the vast majority of dry eye patients experience acute exacerbations of their symptoms, which are commonly referred to as flares, at various times throughout the year. These flares can be triggered by numerous factors, including exposure to allergens, pollution, wind and low humidity, intense visual concentration such as watching television and working at a computer, contact lens wear, smoking and sleep deprivation, which cause ocular surface inflammation and impact tear production and/or tear film stability.

We estimate dry eye disease affects approximately 33 million people in the United States. Based on third-party academic research, we believe dry eye disease results in approximately $55 billion in direct and indirect costs in the United States each year, of which approximately $3.8 billion are direct medical costs. The exact prevalence of dry eye disease is unknown due to the difficulty in defining the disease and the lack of a single diagnostic test to confirm its presence. The prevalence of dry eye disease increases with age, and we expect that the number of dry eye disease cases will increase as the U.S. population continues to age. Epidemiology and market research commissioned by us indicate that there are an estimated 14.5 million patients with a diagnosis of dry eye disease in the United States. Additionally, based on a survey we commissioned of 30 patients diagnosed with dry eye disease, we estimate that approximately 90% of patients with dry eye disease experience flares, with the majority of patients experiencing multi-day symptoms and an average of approximately nine flares per year. The most commonly used treatments for dry eye disease in the United States are over-the-counter eye drops, often referred to as "artificial tears," and two prescription pharmaceutical products, Restasis® and Xiidra®. Artificial tears are intended to supplement insufficient tear production or improve tear film instability, but do not treat the underlying inflammation in dry eye disease. Restasis increases tear production and Xiidra treats the signs and symptoms of dry eye disease, however, both Restasis and Xiidra are typically used chronically. Moreover, market research commissioned by us shows that patients continue to experience flares even while being treated with existing therapies.

We are developing KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease, utilizing a two-week course of therapy administered four times a day. If approved, KPI-121 0.25% could be the first product for this indication. We believe KPI-121 0.25%'s broad mechanism of action, rapid onset of relief of both signs and symptoms, favorable safety and tolerability profile and potential to be complementary to existing therapies, will result in a favorable profile for the management of dry eye flares and other dry eye associated conditions that would benefit from temporary relief of dry eye signs and symptoms. Based on our clinician survey, we believe these features of KPI-121 0.25% will be attractive to prescribing clinicians. Surveyed clinicians indicated they would consider using KPI-121 0.25% to treat approximately 55% of their existing patients that suffer from flares.

In June 2016, we initiated two parallel Phase 3 clinical trials, each with a target enrollment of at least 900 dry eye patients, comparing KPI-121 0.25% to placebo, both administered four times a day for 14 days. As of March 15, 2017, we had enrolled over 500 dry eye patients in each trial. We expect to receive topline results from both trials by the end of 2017. The primary endpoints in these trials are conjunctival hyperemia, or redness, at day 15 and ocular discomfort severity at day 15.

rTKI Program for Retinal Diseases. Commonly used therapies for retinal diseases must be injected directly into the patient's eye, often at monthly intervals. We believe that our MPP technology has the potential to facilitate the delivery of therapeutics into tissues in the back of the eye via topical dosing, which has the potential to provide a less invasive method of administration and a competitive advantage over therapies administered by intravitreal injection. In our rTKI program, we are initially targeting wet age-related macular degeneration, or Wet AMD, with our lead rTKI compound, KPI-285. KPI-285 inhibits the VEGF pathway. In preclinical rabbit studies, topical administration of KPI-285 achieved concentrations in tissues in the back of the eye well above the concentrations required for *in vitro* inhibition of 50% of the VEGF receptor kinase activity. Prior to initiating IND-enabling studies, we may consider potential collaborative partnership opportunities to advance product candidates we develop through our rTKI program, including KPI-285.

Other Potential Applications of Our MPP Technology. While our current focus is on the application of our MPP technology in ophthalmology, we have conducted preclinical studies demonstrating the potential of our MPP technology in other therapeutic areas. Mucus limits delivery of conventionally formulated drugs to the lung, cervical/vaginal tract, gastrointestinal tract and other mucus-protected tissues. In preclinical studies, we have demonstrated that our MPP technology can be used to increase the mucus penetration of over fifteen classes of drugs, including anti-infective and anti-inflammatory drugs.

Our Strategy

Our goal is to become a leading biopharmaceutical company focused on the development and commercialization of therapeutics using our proprietary MPP technology. Key elements of our strategy include:

- successfully complete clinical development of, and seek regulatory approval for, our KPI-121 product candidates;
- maximize the commercial potential of KPI-121 1.0% for post-operative inflammation and pain;
- maximize the commercial potential of KPI-121 0.25% for dry eye disease; and
- advance other early stage pipeline development programs, and further leverage our proprietary MPP technology.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus. These risks include the following:

- We have incurred significant losses from operations and negative cash flows from operations since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability. As of December 31, 2016, we had an accumulated deficit of $92.1 million.
- We will need substantial additional funding. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

- We are dependent on the success of our lead product candidates, KPI-121 1.0% and KPI-121 0.25%. If we are unable to successfully complete our Phase 3 clinical programs and obtain marketing approvals for either KPI-121 1.0% or KPI-121 0.25%, or experience significant delays in doing so, or if, after obtaining marketing approvals, we fail to commercialize these product candidates, our business will be materially harmed.

- If clinical trials of KPI-121 1.0% and KPI-121 0.25% or any other product candidate that we develop fail to demonstrate safety and efficacy to the satisfaction of the FDA or other regulatory authorities or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidate.

- If the FDA does not conclude that KPI-121 1.0% and KPI-121 0.25% satisfy the requirements under Section 505(b)(2) of the Federal Food Drug and Cosmetics Act, or if the requirements for such product candidates under Section 505(b)(2) are not as we expect, the approval pathway for those product candidates may take longer, cost more and entail greater complications and risks than anticipated, and may not be successful.

- We may not be successful in our efforts to develop product candidates based on our MPP technology or expand the use of our MPP technology for treating additional diseases and conditions.

- Even if KPI-121 1.0%, KPI-121 0.25% or any other product candidates receives marketing approval, they may fail to achieve the degree of market acceptance by clinicians and patients, or adequate formulary coverage, pricing or reimbursement by third-party payors and others in the medical community, and the market opportunity for these products may be smaller than we estimate.

- We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do. Our product candidates will, if approved, also compete with existing branded, generic and off-label products.

- If our contracted manufacturing facilities experience production issues for any reason, we may be unable to manufacture commercial quantities of our product candidates for a substantial amount of time, which could have a material adverse effect on our business.

- Even if we are able to commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we may develop, the products may become subject to unfavorable pricing regulations, third-party coverage or reimbursement practices or healthcare reform initiatives, which could harm our business.

- We may be unable to obtain and maintain patent protection for our technology and product candidates, or the scope of the patent protection obtained may not be sufficiently broad or enforceable, such that our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.

- KPI-121 1.0%, KPI-121 0.25% and certain aspects of our MPP technology are protected by patents exclusively licensed from other companies or institutions. If these third parties terminate their agreements with us or fail to maintain or enforce the underlying patents, or we otherwise lose our rights to these patents, our competitive position and our market share in the markets for any of our approved products will be harmed. In addition, if we fail to comply with our obligations in our intellectual property licenses and funding arrangements with third parties, we could lose rights that are important to our business.

Our Corporate Information

We were incorporated under the laws of the state of Delaware on July 7, 2009 under the name Hanes Newco, Inc. We subsequently changed our name to Kala Pharmaceuticals, Inc. on December 11, 2009. Our principal executive offices are located at 100 Beaver Street, Suite 201, Waltham, Massachusetts 02453, and our telephone number is (781) 996-5252. Our website address is www.kalarx.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being an Emerging Growth Company

As a company with less than $1 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we may remain an emerging growth company for up to five years. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to public companies that are not emerging growth companies. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

THE OFFERING

Common stock offered	shares
Common stock to be outstanding immediately following this offering	shares
Option to purchase additional shares	We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of our common stock.
Use of proceeds	The net proceeds from this offering will be approximately $ million, or $ million if the underwriters exercise their option to purchase additional shares in full, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering, together with our existing cash on hand, to fund clinical development of our KPI-121 program, including preparation of NDA submissions for KPI-121 1.0% and KPI-121 0.25%, to prepare for commercialization of KPI-121 1.0% and KPI-121 0.25%, including establishment of a focused, specialty sales force, to support the manufacture of a commercial supply of KPI-121, and to fund other early stage pipeline development programs and for working capital and other general corporate purposes. See "Use of Proceeds."
Risk Factors	You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Proposed NASDAQ Global Market symbol	"KALA"

The number of shares of our common stock to be outstanding after this offering is based on 6,153,300 shares of our common stock outstanding as of February 28, 2017 and 83,863,957 shares of our common stock issuable upon the automatic conversion of all outstanding shares of our preferred stock upon the closing of this offering.

The number of shares of our common stock to be outstanding after this offering excludes:

- 16,643,128 shares of common stock issuable upon exercise of stock options outstanding as of February 28, 2017 at a weighted average exercise price of $0.62 per share;
- 1,761,742 shares of common stock reserved for future issuance under our 2009 Employee, Director and Consultant Equity Incentive Plan, as amended, or the 2009 Plan, as of February 28, 2017;
- additional shares of our common stock that will be available for future issuance, as of the closing of this offering, under our 2017 Stock Incentive Plan, or the 2017 Plan;
- 1,052,222 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of February 28, 2017, at a weighted average exercise price of $1.41 per share; and
- 251,951 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of February 28, 2017 that become exercisable only upon our draw

down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility, at a weighted average exercise price of $1.59 per share.

Unless otherwise indicated, all information in this prospectus assumes:

- no exercise of the outstanding options described above;
- no exercise of the outstanding warrants described above or below;
- no exercise by the underwriters of their option to purchase additional shares of our common stock;
- the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 83,863,957 shares of our common stock upon the closing of this offering;
- the automatic conversion of outstanding warrants to purchase preferred stock into warrants to purchase 1,052,222 shares of common stock upon the closing of this offering;
- the automatic conversion upon the closing of this offering of outstanding warrants to purchase preferred stock into warrants to purchase 251,951 shares of common stock that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility; and
- the filing and effectiveness of our restated certificate of incorporation and the adoption of our amended and restated bylaws upon the closing of this offering.

SUMMARY FINANCIAL DATA

The summary financial data as of and for the years ended December 31, 2015 and 2016 have been derived from our audited financial statements appearing at the end of this prospectus. You should read this data together with our historical financial statements and the related notes included elsewhere in this prospectus and the "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. Our historical results are not necessarily indicative of our future results. The summary financial data in this section are not intended to replace our audited financial statements and related notes appearing at the end of this prospectus.

	Year Ended December 31,	
	2015	2016
	(in thousands, except share and per share amounts)	
Revenue	$ 45	$ —
Operating expenses		
Research and development	11,382	25,029
General and administrative	4,609	7,640
Total operating expenses	15,991	32,669
Loss from operations	(15,946)	(32,669)
Other income (expense)		
Interest income	—	147
Interest expense	(604)	(767)
Change in fair value of warrant liability	(132)	122
Net loss attributable to common stockholders—basic and diluted	$ (16,682)	$ (33,167)
Net loss per share attributable to common stockholders—basic and diluted	$ (2.86)	$ (5.39)
Weighted average shares outstanding—basic and diluted	5,834,766	6,153,300
Pro forma net loss per share attributable to common stockholders—basic and diluted (unaudited) (2)		$ (0.42)
Pro forma weighted average shares outstanding—basic and diluted (unaudited)(2)		78,678,676

	As of December 31, 2016 (unaudited)		
	Actual	Pro Forma(2)	Pro Forma As Adjusted(3)
		(in thousands)	
Balance Sheet Data:			
Cash	$ 45,472	$ 45,472	$
Total assets	46,329	46,329	
Working capital(1)	40,080	40,080	
Long-term debt—less current portion	9,098	9,098	
Warrant liability	1,039	—	
Other long-term liabilities	17	17	
Convertible preferred stock	118,391	—	
Total stockholders' (deficit) equity	(87,762)	31,668	

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

(2) The pro forma information gives effect to:

- the automatic conversion of all outstanding shares of our preferred stock into 83,863,957 shares of common stock upon the closing of this offering;
- the automatic conversion of outstanding warrants to purchase preferred stock into warrants to purchase 1,052,222 shares of common stock upon the closing of this offering;
- the automatic conversion upon the closing of this offering of outstanding warrants to purchase preferred stock into warrants to purchase 251,951 shares of common stock that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility; and
- the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering.

(3) The pro forma as adjusted balance sheet gives further effect to our issuance and 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 page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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 page of this prospectus, would increase or decrease each of cash, total assets, working capital and total stockholders' (deficit) equity on a pro forma as adjusted basis 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 and estimated offering expenses payable by us. An increase or decrease of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease each of cash, total assets, working capital and total stockholders' equity on a pro forma as adjusted basis by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below together with all of the other information contained in this prospectus, including our financial statements and the related notes appearing at the end of this prospectus, before deciding to invest in our common stock. If any of the following risks actually occur, our business, prospects, operating results and financial condition could suffer materially. In such event, the trading price of our common stock could decline and you might lose all or part of your investment.

Risks Related to Our Financial Position and Need For Additional Capital

We have incurred significant losses from operations and negative cash flows from operations since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.

Since inception, we have incurred significant losses from operations and negative cash flows from operations. Our net losses were $16.7 million for the year ended December 31, 2015 and $33.2 million for the year ended December 31, 2016. As of December 31, 2016, we had an accumulated deficit of $92.1 million. We have not generated any revenues to date from product sales and have financed our operations primarily through private placements of our preferred stock, convertible debt financings and borrowings under credit facilities. We have devoted substantially all of our financial resources and efforts to research and development, including preclinical studies and clinical trials. We expect to continue to incur significant expenses and operating losses over the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year.

We anticipate that our expenses will increase substantially as compared to prior periods as we complete our Phase 3 trials of KPI-121 1.0% for the treatment of post-operative inflammation and pain following cataract surgery and of KPI-121 0.25% in patients with dry eye disease and prepare for commercialization of our product candidates, as a result of increased headcount, including management personnel to support our clinical, manufacturing and commercialization activities, expanded infrastructure, increased legal, compliance, accounting and investor and public relations expenses associated with being a public company and increased insurance premiums, among other factors. Our license agreement with The Johns Hopkins University, or JHU, under which we license certain of our patent rights and a significant portion of the technology for KPI-121 1.0% and KPI-121 0.25%, imposes royalty and other financial obligations on us, and we may enter into additional licensing and funding arrangements with third parties that may impose milestone payment, royalty, insurance and other obligations on us.

Our expenses will also increase if and as we:

- seek marketing approvals for KPI-121 1.0% and KPI-121 0.25% and any other product candidates that successfully complete clinical development;
- pursue the clinical development of KPI-121 for the treatment of other additional indications or for use in other patient populations or, if approved, seek to broaden the label of KPI-121 1.0% or KPI-121 0.25%;
- pursue the preclinical and clinical development of product candidates derived from our rTKI program for use in the treatment of retinal diseases, such as AMD, DR, DME and RVO;
- establish sales, marketing and distribution capabilities for our product candidates for which we obtain marketing approval;
- scale up our manufacturing processes and capabilities to support our clinical trials of our product candidates and commercialization of any of our product candidates for which we obtain marketing approval;

- leverage our proprietary MPP technology to advance high-value therapeutics into preclinical and clinical development;
- in-license or acquire the rights to other products, product candidates or technologies;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, scientific and management personnel;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company; and
- increase our product liability insurance coverage as we expand our commercialization efforts.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Our expenses will increase if:

- we are required by the FDA or non-U.S. regulatory agencies to perform trials or studies in addition to those currently expected;
- there are any delays in enrollment of patients in or completing our clinical trials or the development of our product candidates; or
- there are any third-party challenges to our intellectual property portfolio, or the need arises to defend against intellectual property-related claims.

Our ability to become and remain profitable depends on our ability to generate revenue. We do not expect to generate revenue that is sufficient to achieve profitability unless and until we obtain marketing approval for and commercialize one of our product candidates. We do not expect to commercialize any of our product candidates before 2019, if ever. This will require us to be successful in a range of challenging activities, including:

- completing and obtaining favorable results from our second Phase 3 clinical trial of KPI-121 1.0% for the treatment of inflammation and pain following cataract surgery;
- completing and obtaining favorable results from our two ongoing Phase 3 clinical trials of KPI-121 0.25% in patients with dry eye disease;
- obtaining marketing approval for KPI-121 1.0%, KPI-121 0.25% or any other product candidates;
- manufacturing at commercial scale, marketing, selling and distributing those products for which we obtain marketing approval;
- achieving an adequate level of market acceptance of and obtaining and maintaining coverage and adequate reimbursement from third-party payors for our products; and
- obtaining, maintaining and protecting our intellectual property rights.

We may never succeed in these activities and may never generate revenue that is sufficient to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We are an early-stage company. Our operations to date have been limited to organizing and staffing our company, acquiring rights to intellectual property, business planning, raising capital and developing KPI-121 and other product candidates. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to fluctuate significantly from quarter-to-quarter and year-to-year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

We will need substantial additional funding. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect to devote substantial financial resources to our ongoing and planned activities, particularly as we conduct our multiple Phase 3 clinical trials and, assuming positive results from these trials, seek marketing approval for KPI-121 1.0% and KPI-121 0.25%, and continue the development of and potentially seek marketing approval for other product candidates. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance our preclinical activities and clinical trials. In addition, our expenses will further increase if we suffer any delays in our Phase 3 clinical programs for KPI-121 1.0% or KPI-121 0.25%, including delays in enrollment of patients. We also expect to devote additional financial resources to conducting research and development, initiating clinical trials of, and potentially seeking regulatory approval for, other potential product candidates, including product candidates that we may develop using our rTKI program.

If we obtain marketing approval for KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we develop, we expect to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company, hiring additional personnel and expanding our facilities. Accordingly, we may need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

Our future capital requirements will depend on many factors, including:

- the progress, costs and results of our ongoing Phase 3 clinical trials for KPI-121 1.0% and KPI-121 0.25% and of any clinical activities for regulatory review of KPI-121 1.0% and KPI-121 0.25% outside of the United States;
- the costs and timing of process development and manufacturing scale-up activities associated with KPI-121 1.0% and KPI-121 0.25%;
- the costs, timing and outcome of regulatory review of KPI-121 1.0% and KPI-121 0.25%;
- the costs of commercialization activities for KPI-121 1.0% and KPI-121 0.25% if we receive, or expect to receive, marketing approval, including the costs and timing of establishing product sales, marketing, distribution and outsourced manufacturing capabilities;

- subject to receipt of marketing approval, revenue received from commercial sales of KPI-121 1.0% and KPI-121 0.25%;
- our ability to establish and maintain strategic collaborations, licensing or other agreements and the financial terms of such agreements;
- the scope, progress, results and costs of any product candidates that we may derive from our rTKI program or any other product candidates that we may develop;
- the extent to which we in-license or acquire rights to other products, product candidates or technologies; and
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against any intellectual property-related claims.

As of December 31, 2016, we had cash of approximately $45.5 million. We believe that the net proceeds from this offering, together with our existing cash as of December 31, 2016, will enable us to fund our operating expenses, debt service obligations and capital expenditure requirements at least through . However, we have based this estimate on assumptions that may prove to be wrong, and our operating plan may change as a result of many factors currently unknown to us. As a result, we could deplete our capital resources sooner than we currently expect.

Conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete. We may never generate the necessary data or results required to obtain regulatory approval of products with the market potential sufficient to enable us to achieve profitability. We do not expect to generate revenue from sales of any product candidates until at least 2019, if at all. Accordingly, we will need to obtain substantial additional financing to achieve our business objectives. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. Adequate additional financing may not be available to us on acceptable terms, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate preclinical studies, clinical trials or other development activities for one or more of our product candidates or delay, limit, reduce or terminate our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates.

Raising additional capital may cause dilution to our stockholders, including purchasers of our common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and marketing and distribution arrangements. We do not have any committed external source of funds other than the potential availability of $10.0 million under our 2014 Debt Facility if we receive positive results sufficient to support an NDA submission from our second Phase 3 clinical trial for KPI-121 1.0%. 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 these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. If we draw down on the remaining $10.0 million of potentially available borrowings under our 2014 Debt Facility, the lenders thereunder will be entitled to exercise warrants for up to an additional 251,951 shares of our common stock. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Our pledge of our

assets as collateral to secure our obligations under our credit facility may limit our ability to obtain additional debt financing.

If we raise additional funds through collaborations, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves.

Our existing and future indebtedness may limit cash flow available to invest in the ongoing needs of our business.

As of December 31, 2016, we had $10.0 million of outstanding borrowings under our 2014 Debt Facility, which we are required to begin repaying following the end of an interest-only period, in October 2017, in equal monthly installments until October 2020. We also are eligible to borrow an additional $10.0 million between the date on which we receive positive results sufficient to support an NDA submission from our second Phase 3 clinical trial for KPI-121 1.0% for the treatment of inflammation and pain following ocular surgery and October 13, 2017. Our obligations under this agreement are secured by substantially all of our assets other than our intellectual property. We could in the future incur additional indebtedness beyond our borrowings under the 2014 Debt Facility.

Our debt combined with our other financial obligations and contractual commitments could have significant adverse consequences, including:

- requiring us to dedicate a substantial portion of cash flow from operations or cash on hand to the payment of interest on, and principal of, our debt, which will reduce the amounts available to fund working capital, capital expenditures, product development efforts and other general corporate purposes;
- increasing our vulnerability to adverse changes in general economic, industry and market conditions;
- subjecting us to restrictive covenants that may reduce our ability to take certain corporate actions or obtain further debt or equity financing;
- limiting our flexibility in planning for, or reacting to, changes in our business and our industry; and
- placing us at a competitive disadvantage compared to our competitors that have less debt or better debt servicing options.

We intend to satisfy our current and future debt service obligations with our existing cash and funds from external sources. Nonetheless, we may not have sufficient funds or may be unable to arrange for additional financing to pay the amounts due under our existing debt. Funds from external sources may not be available on acceptable terms, if at all. In addition, a failure to comply with the covenants under our credit facility could result in an event of default and acceleration of amounts due. If an event of default occurs and Square 1 Bank accelerates the amounts due under the 2014 Debt Facility, we may not be able to make accelerated payments, and Square 1 Bank could seek to enforce security interests in the collateral securing such indebtedness.

Risks Related to Product Development

We are dependent on the success of our lead product candidates, KPI-121 1.0% and KPI-121 0.25%. If we are unable to successfully complete our Phase 3 clinical programs and obtain marketing approvals for either KPI-121 1.0% or KPI-121 0.25%, or experience significant delays in doing so, or if, after obtaining marketing approvals, we fail to commercialize these product candidates, our business will be materially harmed.

We have devoted a significant portion of our financial resources and business efforts to the development of KPI-121 1.0% for the post-operative treatment of inflammation and pain following ocular surgery and KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease. There is a significant risk that we will fail to successfully develop KPI-121 1.0% and/or KPI-121 0.25%. Our Phase 3 clinical program for KPI-121 1.0% consists of a second Phase 3 clinical trial evaluating KPI-121 1.0% in 520 patients with inflammation and pain following cataract surgery. We expect to receive topline results of this clinical trial in the second quarter of 2017. Our Phase 3 clinical program for KPI-121 0.25% consists of two parallel Phase 3 clinical trials evaluating KPI-121 0.25%, each of which is expected to include approximately 900 dry eye patients. We expect to receive topline results from these parallel Phase 3 clinical trials by the end of 2017. The timing of the availability of such topline data and the completion of our planned Phase 3 clinical programs is dependent, in part, on our ability to locate and enroll a sufficient number of eligible patients in our Phase 3 clinical programs on a timely basis. We cannot accurately predict when or if either of these product candidates will be proven to be effective or safe in humans or whether either will receive marketing approval. Our ability to generate product revenues will depend on our obtaining marketing approval for, and commercializing one or both of, KPI-121 1.0% and KPI-121 0.25%.

The success of KPI-121 1.0% and KPI-121 0.25% and any other product candidates will depend on many factors, including the following:

- completing and obtaining favorable results from our second ongoing Phase 3 clinical trial of KPI-121 1.0%;
- completing and obtaining favorable results from our two ongoing Phase 3 clinical trials of KPI-121 0.25%;
- applying for and receiving marketing approvals from applicable regulatory authorities for our product candidates;
- receiving regulatory approval of our manufacturing processes and our third-party manufacturers' facilities from applicable regulatory authorities;
- expanding and maintaining a workforce of experienced scientists and others with experience in MPP technology to continue to develop our product candidates;
- establishing sales, marketing and distribution capabilities for KPI-121 1.0% and KPI-121 0.25% and successfully launching commercial sales of any other product candidates for which we obtain marketing approval, whether alone or in collaboration with others;
- acceptance of KPI-121 1.0% and KPI-121 0.25% and our other product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- maintaining an acceptable safety profile of our products following approval;
- obtaining and maintaining coverage, adequate pricing, and adequate reimbursement from third-party payors, including government payors, for our product candidates;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;

- protecting our rights in our intellectual property portfolio; and
- not infringing on others' intellectual property rights.

Successful development of KPI-121 1.0% or KPI-121 0.25% for additional indications, if any, or for use in broader patient populations and our ability, if it is approved, to broaden the label for KPI-121 1.0% or KPI-121 0.25% will depend on similar factors. If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business.

If clinical trials of KPI-121 1.0% and KPI-121 0.25% or any other product candidate that we develop fail to demonstrate safety and efficacy to the satisfaction of the FDA or other regulatory authorities or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of such product candidate.

Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, including KPI-121 1.0% and KPI-121 0.25%, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their product candidates. Furthermore, the failure of any other product candidates to demonstrate safety and efficacy in any clinical trial could negatively impact the perception of our other product candidates and/or cause the FDA or other regulatory authorities to require additional testing before approving any of our product candidates. For example, we previously conducted a Phase 2 clinical trial of KPI-121 0.25% for the treatment of meibomian gland dysfunction which did not achieve its primary endpoint. The failure of this trial may have an adverse impact on the perceived safety or efficacy of KPI-121 0.25% in treating dry eye disease or other indications or of KPI-121 1.0%. In addition, we have not conducted any Phase 2 clinical trial of KPI-121 1.0%. The lack of Phase 2 trial data may have an adverse impact on the perceived safety or efficacy of KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery or other indications, and may adversely affect our ability to obtain marketing approval for KPI-121 1.0% from the FDA or outside the United States.

We expect, based on our current development plan, that the FDA will require us to demonstrate effectiveness on both of our primary endpoints in our two Phase 3 clinical trials for market approval of an indication for the temporary relief of the signs and symptoms of dry eye disease. KPI-121 0.25% did not achieve statistical significance for the endpoint of ocular discomfort severity in our completed Phase 2 clinical trial. If KPI-121 0.25% does not achieve statistical significance in both primary endpoints in our Phase 3 clinical trials, the FDA may require us to conduct additional clinical trials to support approval of KPI-121 0.25% in this indication. Regulatory authorities outside the United States, in particular in the European Union, have not issued guidance on the requirements for approval of a dry eye drug. Our Phase 3 clinical trials of KPI-121 0.25% may not be sufficient to support an application for marketing approval outside the United States. Further, if regulatory authorities outside the United States do not accept the data from any trial we conduct in the United States, in particular if the European Union does not allow us to utilize the results from our ongoing Phase 3 clinical trials of KPI-121 0.25% pursuant to the Article 10(3) submission pathway or otherwise, we will likely need to conduct additional trials to obtain marketing approval in such jurisdiction, which would be costly and time-consuming and could delay or permanently halt our ability to commercialize the applicable product candidates in the applicable jurisdictions.

We performed post-hoc analyses on the results of our completed Phase 2 clinical trial for KPI-121 0.25% for purpose of designing our Phase 3 clinical trials for KPI-121 0.25%. We may also conduct post-hoc analyses on the results of clinical trials in the future. Post-hoc analyses performed after unmasking trial results can result in the introduction of bias and may not be predictive of success in our Phase 3 clinical trials.

If we are required to conduct additional clinical trials or other testing of KPI-121 0.25% or KPI-121 1.0% or any other product candidate that we develop beyond those that we currently expect, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

If we experience any of a number of possible unforeseen events in connection with our clinical trials, potential marketing approval or commercialization of our product candidates could be delayed or prevented.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidates that we may develop, including:

- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their obligations to us in a timely manner, or at all;
- regulators or institutional review boards may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- we may decide, or regulators or institutional review boards may require us, to suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require us to perform additional or unanticipated clinical trials to obtain approval or we may be subject to additional post-marketing testing requirements to maintain regulatory approval;

- regulators may revise the requirements for approving our product candidates, or such requirements may not be as we anticipate;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate or may be delayed;
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators or institutional review boards to suspend or terminate trials; and
- regulatory authorities may withdraw their approval of a product or impose restrictions on its distribution, such as in the form of a modified Risk Evaluation and Mitigation Strategy, or REMS.

Our product development costs will also increase if we experience delays in testing or marketing approvals. We do not know whether any of our preclinical studies or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for KPI-121 1.0%, KPI-121 0.25% or any other product candidate we develop if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States.

Patient enrollment is affected by a variety of factors, including:

- the prevalence and severity of the ophthalmic disease or condition under investigation;
- the patient eligibility criteria for the trial in question;
- the perceived risks and benefits of the product candidate under study;
- the existence of existing treatments for the indications for which we are conducting clinical trials;
- the efforts to facilitate timely enrollment in clinical trials;
- the patient referral practices of clinicians;
- the ability to monitor patients adequately during and after treatment;
- the proximity and availability of clinical trial sites for prospective patients;
- the conducting of clinical trials by competitors for product candidates that treat the same indications as our product candidates; and
- the lack of adequate compensation for prospective patients.

Our inability to locate and enroll a sufficient number of patients for our clinical trials would result in significant delays, could require us to abandon one or more clinical trials altogether and could delay or prevent our receipt of necessary regulatory approvals. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

If the FDA does not conclude that KPI-121 1.0% and KPI-121 0.25% satisfy the requirements under Section 505(b)(2) of the Federal Food Drug and Cosmetics Act, or if the requirements for such product candidates under Section 505(b)(2) are not as we expect, the approval pathway for those product candidates may take longer, cost more and entail greater complications and risks than anticipated, and may not be successful.

We intend to seek FDA approval of KPI-121 1.0% and KPI-121 0.25% through the Section 505(b)(2) regulatory pathway. The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, added Section 505(b)(2) to the Federal Food, Drug and Cosmetic Act. Section 505(b)(2) 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 received a right of reference, which could expedite the development program for KPI-121 1.0% and KPI-121 0.25% by potentially decreasing the amount of clinical data that we would need to generate in order to obtain FDA approval. If the FDA does not allow us to pursue the Section 505(b)(2) regulatory pathway as anticipated, we may need to conduct additional clinical trials, provide additional data and information and meet additional standards for regulatory approval. If this were to occur, the time and financial resources required to obtain FDA approval for KPI-121 1.0% and KPI-121 0.25%, and complications and risks associated with approval of KPI-121 1.0% and KPI-121 0.25%, would likely substantially increase. Even if we are allowed to pursue the Section 505(b)(2) pathway to FDA approval, we cannot assure you that KPI-121 1.0% and KPI-121 0.25% will receive the requisite approvals for commercialization.

In addition, notwithstanding the approval of a number of products by the FDA under Section 505(b)(2) over the last few years, certain competitors and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, the FDA may be required to change its 505(b)(2) policies and practices, which could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2). In addition, the pharmaceutical industry is highly competitive, and Section 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 Section 505(b)(2) NDA. These requirements may give rise to patent litigation and to mandatory delays in approval of our NDAs for up to 30 months, depending on the outcome of any litigation. 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. Thus, even if we are able to utilize the Section 505(b)(2) regulatory pathway, there is no guarantee this would ultimately lead to faster product development or earlier approval of KPI-121 1.0% or KPI-121 0.25%.

Even if KPI-121 1.0% and KPI-121 0.25% are approved under Section 505(b)(2), their approval may be subject to limitations on the indicated uses for which the products may be marketed or to other conditions of approval, or may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the products.

If serious adverse or unacceptable side effects are identified during the development of KPI-121 1.0%, KPI-121 0.25% or any other product candidates that we may develop, we may need to abandon or limit our development of such product candidates.

If KPI-121 1.0%, KPI-121 0.25% or any other product candidates are associated with serious adverse events or undesirable side effects in clinical trials or have characteristics that are unexpected, we may need to abandon their development or limit development to more narrow uses or subpopulations in which the serious adverse events, undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. The most common

adverse effects to date in trials evaluating the safety and efficacy of KPI-121 1.0% and KPI-121 0.25% have been eye pain, instillation site pain and photophobia, which is discomfort or pain due to exposure to light. There have been no serious adverse events related to the administration of KPI-121 reported in any of our clinical trials to date. Increases in IOP and cataract formation are additional adverse effects associated with the use of corticosteroids and in our Phase 2 trial of KPI-121 0.25%, one patient out of the 72 patients in the KPI-121 0.25% treatment arm had elevated IOP classified as an adverse event as of day 29. We have no clinical safety data on or patient exposure to either KPI-121 concentration for longer than 28 days. Our understanding of the relationship between our products and these adverse effects may change as we gather more information, and additional unexpected adverse effects may occur. Many compounds that initially showed promise in clinical or earlier stage testing for treating ophthalmic disease have later been found to cause side effects that prevented further development of the compound. In addition, adverse events which had initially been considered unrelated to the study treatment may later be found to be caused by the study treatment. Moreover, incorrect or improper use of our product candidates (including use of KPI-121 0.25% more frequently than is prescribed) by patients could cause increases in IOP, and may result in additional unexpected side effects or adverse events. There can be no assurance that our product candidates will be used correctly, and if used incorrectly, such misuse could hamper commercial adoption of our product candidate, if approved, at the rate we currently expect.

We may not be successful in our efforts to develop product candidates based on our MPP technology or expand the use of our MPP technology for treating additional diseases and conditions.

We are currently directing all of our development efforts towards applying our MPP technology to develop product candidates that are designed to diffuse through the mucus layer and enable the active drug substance to reach cells in the underlying target tissue. We have product candidates at various stages of development for treatment of eye diseases and are exploring the potential use of our MPP technology in other diseases, including diseases of the lungs, cervical/vaginal tract and gastrointestinal tract. Our existing product candidates and any other potential product candidates that we identify may not be suitable for continued preclinical or clinical development, including as a result of being shown to have harmful side effects or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we do not successfully develop and commercialize our product candidates that we develop based upon our MPP technology approach, we will not be able to obtain substantial product revenues in future periods.

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

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

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

We may in the future choose to conduct one or more of our clinical trials outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of these data is subject to conditions imposed by the FDA. For example, the clinical trial must be well designed and conducted and be performed by qualified investigators in accordance with ethical principles. The trial population must also adequately represent the U.S. population, and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will depend on its determination that the trials also complied with all applicable U.S. laws and regulations. If the FDA does not accept the data from any trial that we conduct outside the United States, it would likely result in the need for additional trials, which would be costly and time-consuming and could delay or permanently halt our development of the applicable product candidates.

Risks Related to the Commercialization of Our Product Candidates

Even if KPI-121 1.0%, KPI-121 0.25% or any other product candidates receives marketing approval, they may fail to achieve market acceptance by clinicians and patients, or adequate formulary coverage, pricing or reimbursement by third-party payors and others in the medical community, and the market opportunity for these products may be smaller than we estimate.

If KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we develop receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by clinicians, patients, third-party payors and others in the medical community. Common treatments in the United States for inflammation and pain following ocular surgery include corticosteroids. While the most commonly used corticosteroids are approved for four-times-a-day dosing, and we plan to seek approval of KPI 1.0% with twice-a-day dosing, doctors may continue to rely on ocular steroids other than KPI-121 1.0% and other treatments rather than KPI-121 1.0%, if and when it is approved for marketing by the FDA. It is also possible that other therapeutics will be approved for treatment of inflammation and pain following ocular surgery with twice-a-day dosing.

While there are no drugs currently approved in the United States for the temporary relief of the signs and symptoms of dry eye disease, current treatments that are used in the United States for dry eye disease include over-the-counter artificial tears, Restasis®, Xiidra® and off-label use of corticosteroids. It is possible that doctors may continue to rely on these treatments rather than KPI-121 0.25%, if and when it is approved for marketing by the FDA. In addition, if generic versions of any products that compete with any of our product candidates are approved for marketing by the FDA, they would likely be offered at a substantially lower price than we expect to offer for our product candidates, if approved. As a result, clinicians, patients and third-party payors may choose to rely on such products rather than our product candidates.

If KPI-121 1.0% or KPI-121 0.25% does not achieve an adequate level of acceptance, formulary coverage, pricing or reimbursement we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages of our product candidates compared to alternative treatments, including the existing standard of care;
- our ability to offer our products for sale at competitive prices, particularly in light of the lower cost of alternative treatments;

- the clinical indications for which the product is approved;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of clinicians to prescribe these therapies;
- the strength of our marketing and distribution support;
- the timing of market introduction of competitive products;
- the availability of third-party formulary coverage and adequate reimbursement, particularly by Medicare in light of the prevalence of dry eye disease and cataracts in persons over age 55;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

Our assessment of the potential market opportunity for KPI-121 1.0%, KPI-121 0.25% and other product candidates is based on industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties, some of which we commissioned. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data. The potential market opportunity for the treatment of dry eye disease in particular is difficult to precisely estimate. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research and other surveys, which may be based on a small sample size and fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions. If any of our assumptions or estimates, or these publications, research, surveys or studies prove to be inaccurate, then the actual market for KPI-121 1.0%, KPI-121 0.25% or any other product candidates may be smaller than we expect, and as a result our product revenue may be limited and it may be more difficult for us to achieve or maintain profitability.

If we are unable to establish sales, marketing and distribution capabilities or enter into sales, marketing and distribution agreements with third parties, we may not be successful in commercializing KPI-121 1.0%, KPI-121 0.25% or any other product candidates that we may develop if and when they are approved.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of therapeutic products. To achieve commercial success for any product for which we obtained marketing approval, we will need to establish sales, marketing and distribution capabilities, either ourselves or through collaborations or other arrangements with third parties.

Subject to successful results of our ongoing Phase 3 clinical trials and FDA approval of any of our product candidates, we plan to build a focused specialty sales and marketing infrastructure to market or co-promote KPI-121 1.0%, KPI-121 0.25% and possibly other product candidates that we develop in the United States, if and when they are approved, as well as distribution capabilities. There are risks involved with establishing our own sales, marketing and distribution capabilities. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. Further, we may underestimate the size of the sales force required for a successful product launch and may need to expand our sales force earlier and at a higher cost than we anticipated. If the commercial launch of KPI-121 1.0%, KPI-121 0.25% or any other product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidates on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to clinicians or persuade adequate numbers of clinicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales, marketing and distribution organization.

While we cannot be certain when, if ever, we will seek and/or receive marketing approval to commercialize any of our product candidates outside the United States, assuming positive results from our U.S. Phase 3 clinical trials of KPI-121 0.25% for the treatment of dry eye disease, we plan to seek marketing approval and explore commercialization of KPI-121 0.25% in certain markets outside the United States, including the EU, utilizing a variety of collaboration, distribution and other marketing arrangements with one or more third parties. Our product revenues and our profitability, if any, under any such third-party collaboration, distribution or other marketing arrangements are likely to be lower than if we were to market, sell and distribute KPI-121 0.25% ourselves. We may also consider seeking marketing approval outside the United States for other product candidates in future. If we decide to seek regulatory approval for any of our product candidates outside the United States, we may need to seek additional patent approvals, seek licenses to patents held by third parties and/or face claims of infringing third-party patent rights. In addition, we may not be successful in entering into arrangements with third parties to sell, market and distribute KPI-121 1.0%, KPI-121 0.25% or any other product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market KPI-121 1.0%, KPI-121 0.25% or other product candidates effectively. If we do not establish sales, marketing and distribution capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing KPI-121 1.0%, KPI-121 0.25% or any other product candidates that we may develop.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do. Our product candidates will, if approved, also compete with existing branded, generic and off-label products.

The development and commercialization of new drug products is highly competitive. We face competition with respect to KPI-121 1.0%, KPI-121 0.25% and any other product candidates, and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Our product candidates will target markets that are already served by a variety of competing products. Many of these existing products have achieved widespread acceptance among clinicians, patients and payors. In addition, many of these products are available on a generic basis, and our product candidates may not demonstrate sufficient additional clinical benefits to clinicians, patients or payors to justify a higher price compared to generic products. In many cases, insurers or other third-party payors, particularly Medicare, seek to encourage the use of generic products. Given that we are

developing products that utilize an FDA-approved corticosteroid, our product candidates, if approved, will face competition from generic and branded versions of existing drugs based on corticosteroids that are administered in a different manner.

Following ocular surgery, topical steroids are commonly used to manage and prevent complications from post-operative inflammation. The current market leaders for topical steroids in the United States, based on revenue, are Lotemax® products and Durezol®. There are also a number of companies in the United States developing products and therapies in preclinical research and clinical development for the treatment of inflammation and pain following ocular surgery, including the following: Valeant Pharmaceuticals International, Inc. is developing an LE gel, which is formulated for topical delivery and is currently in Phase 3 clinical development; Ocular Therapeutix, Inc. is developing Dextenza™, a punctal plug that is currently in Phase 3 clinical development and has filed an NDA for the treatment of ocular pain following ophthalmic surgery; and Icon Bioscience, Inc. is developing IBI-10090, which is formulated as a drug delivery system, or DDS, to be injected into the eye following ocular surgery and is currently in Phase 3 clinical development.

Current disease management approaches for dry eye disease in the United States include the following: over-the-counter artificial tear eye drops, which are used on an intermittent or chronic basis to provide short term symptomatic relief of dryness and irritation; off-label prescription drugs, including topical steroid drops and/or other similar products, which are prescribed on occasion for treatment of dry eye disease; on-label prescription drugs, including Restasis and Xiidra, which are the only prescription pharmaceutical products that are approved in the United States for use in patients with dry eye disease. Restasis is approved for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation and Xiidra is approved for treatment of the signs and symptoms of dry eye disease. Both are typically used chronically as part of the dry eye management regimen, which also includes artificial tears and other palliative therapies, such as hot compresses for the eye and lid hygiene management; and devices, such as punctal plugs that are inserted into the tear ducts to inhibit tear drainage, resulting in more moisture on the surface of the eye.

We are developing KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease, which may include the management of dry eye disease flares. Any product that is developed for the temporary treatment of the signs and symptoms of dry eye disease could directly compete with KPI-121 0.25%. There are several product candidates in preclinical and clinical development in the United States for the treatment of dry eye disease. If any of these product candidates is approved and such product candidate either treats the signs and symptoms of dry eye disease or reduces the frequency of flares in dry eye patients, it could reduce the overall market opportunity for KPI-121 0.25%. These product candidates are being developed by pharmaceutical companies, biotechnology companies, and specialty pharmaceutical and generic drug companies of various sizes, such as Mimetogen Pharmaceuticals, Inc., or Mimetogen (MIM-D3), Sun Pharmaceuticals (Seciera™), ReGenTree (TGN-259) and Allergan plc, or Allergan (AGN-195263). There are also other product candidates for the treatment of dry eye disease in the United States in earlier stage development. Further, Oculeve, which was acquired by Allergan, is developing True Tear, a nasal neurostimulation medical device that is intended to increase tear production.

See "Business—Competition" for additional information regarding competing products and product candidates.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than our products. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

In addition, our ability to compete may be affected in many cases by insurers or other third-party payors, particularly Medicare, seeking to encourage the use of generic products. Generic products are currently being used for certain of the indications that we are pursuing, and additional products are expected to become available on a generic basis over the coming years.

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

If our contracted manufacturing facilities experience production issues for any reason, we may be unable to manufacture commercial quantities of our product candidates for a substantial amount of time, which could have a material adverse effect on our business.

We will rely on third-party contract manufacturers to manufacture commercial supplies of KPI-121 1.0% and KPI-121 0.25%. We expect to rely on third-party manufacturers to manufacture clinical supplies of other product candidates and commercial supplies of all of our products if and when approved for marketing by applicable regulatory authorities. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or manufacture our product candidates in accordance with regulatory requirements, if there are disagreements between us and such parties, or if such parties are unable to expand capacities to support commercialization of any of our product candidates for which we obtain marketing approval, we may not be able to complete, or may be delayed in producing sufficient product candidates to meet our supply requirements. These facilities may also be affected by natural disasters, such as floods or fire, or such facilities could face manufacturing issues, such as contamination or regulatory concerns following a regulatory inspection of such facility. In such instances, we may need to locate an appropriate replacement third-party relationship, which may not be readily available or on acceptable terms, which would cause additional delay and increased expense, including as a result of additional required FDA approvals, and may have a material adverse effect on our business.

Our third-party manufacturers are subject to inspection and approval by the FDA before we can commence the manufacture and sale of any of our product candidates, and thereafter subject to FDA inspection from time to time. Failure by our third-party manufacturers to pass such inspections and otherwise satisfactorily complete the FDA approval regimen with respect to our product candidates may result in regulatory actions such as the issuance of FDA Form 483 notices of observations, warning letters or injunctions or the loss of operating licenses. Based on the severity of any such regulatory action, our clinical or commercial supply could be interrupted or limited, which could have a material adverse effect on our business.

We or our third-party manufacturers may also encounter shortages in the raw materials or active pharmaceutical ingredient necessary to produce our product candidates in the quantities needed for our clinical trials or, if our product candidates are approved, in sufficient quantities for commercialization or to meet an increase in demand, as a result of capacity constraints or delays or disruptions in the market for the raw materials or active pharmaceutical ingredient, including shortages caused by the purchase of such raw materials or active pharmaceutical ingredient by our competitors or others. The failure of us or our third-party manufacturers to obtain the raw materials or active pharmaceutical

ingredient necessary to manufacture sufficient quantities of our product candidates, may have a material adverse effect on our business.

Even if we are able to commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we may develop, the products may become subject to unfavorable pricing regulations, third-party coverage or reimbursement practices or healthcare reform initiatives, which could harm our business.

Our ability to commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidates that we may develop successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government healthcare programs, private health insurers, managed care plans and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Coverage and reimbursement may not be available for KPI-121 1.0%, KPI-121 0.25% or any other product that we commercialize and, even if they are available, the level of reimbursement may not be satisfactory.

Inadequate reimbursement may adversely affect the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement for our products may be difficult. We may be required to conduct expensive pharmacoeconomic studies to justify coverage and reimbursement or the level of reimbursement relative to other therapies. If coverage and adequate reimbursement are not available or reimbursement is available only to limited levels, we may not be able to successfully commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or similar regulatory authorities outside the United States. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution expenses. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop would compromise our ability to generate revenues and become profitable.

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain

marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

There can be no assurance that our product candidates, even if they are approved for sale in the United States or in other countries, will be considered medically reasonable and necessary for a specific indication or cost-effective by third-party payors, or that coverage and an adequate level of reimbursement will be available or that third-party payors' reimbursement policies will not adversely affect our ability to sell our product candidates profitably.

Product liability lawsuits against us could divert our resources and could cause us to incur substantial liabilities and to limit commercialization of any products that we develop.

We face an inherent risk of product liability exposure related to the use of our product candidates that we develop in human clinical trials. We face an even greater risk if we commercially sell any products that we develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced time and attention of our management to pursue our business strategy; and
- the inability to commercialize any products that we develop.

We currently hold $10 million in product liability insurance coverage in the aggregate, with a per incident limit of $10 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials. We will need to further increase our insurance coverage if we commence commercialization of any of KPI-121 1.0%, KPI-121 0.25% or any product candidates for which we obtain marketing approval. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to Our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We relied on third-party clinical research organizations, or CROs, in conducting our completed Phase 3 clinical trial of KPI-121 1.0% for the treatment of inflammation and pain following cataract surgery, our completed Phase 2 clinical trial of KPI-121 0.25% in patients with dry eye disease, and our ongoing Phase 3 clinical trials of KPI-121 1.0% and KPI-121 0.25%. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical

investigators, to conduct clinical trials of any other product candidate that we develop. We or these third parties may terminate their engagements with us at any time for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, that would delay our product development activities.

Our reliance on these third parties for clinical development activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practices, or GCPs, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

We contract with third parties for the manufacture of KPI-121 1.0% and KPI-121 0.25% for commercialization and for clinical trials and commercialization of any of our other existing and any future product candidates. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of KPI-121 1.0% and KPI-121 0.25% or any other product candidates. We expect to rely on third-party manufacturers to manufacture clinical supplies of any other product candidates and commercial supplies of all of our products if and when approved for marketing by applicable regulatory authorities. Our current and anticipated future dependence upon others for the manufacture of KPI-121 1.0% and KPI-121 0.25% and any other product candidate or product that we develop may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis. In addition, any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval.

To date, we have obtained materials for KPI-121 for our clinical trials from third-party manufacturers. We have supply agreements in place with these contract manufacturers to provide commercial supply. We obtain the active pharmaceutical ingredient for KPI-121 from a third-party API manufacturer. While we have long-term commercial supply agreements with these third-party manufacturers, if these suppliers do not perform as we expect, we may be required to replace one or more suppliers. Although we believe that there are a number of potential long term replacements to our suppliers, we may incur added costs and delays in identifying and qualifying any such replacements.

The FDA maintains strict requirements governing the manufacturing process. When a manufacturer seeks to modify or make even seemingly minor changes to that process, the FDA may

require the applicant to conduct a comparability study that evaluates the potential differences in the product resulting from the change in the manufacturing process. The FDA has issued several guidances on this point. In connection with our application for approval to market KPI-121 1.0%, KPI-121 0.25% or other product candidates in the United States, we may be required to conduct a comparability study if the product we intend to market is supplied by a manufacturer different from the one who supplied the product evaluated in our clinical studies. Delays in designing and completing this study to the satisfaction of the FDA could delay or preclude our development and commercialization plans and thereby limit our revenues and growth.

Reliance on third-party manufacturers entails additional risks, including:

- KPI-121 1.0%, KPI-121 0.25% and any other product that we develop may compete with other product candidates and products for access to a limited number of suitable manufacturing facilities that operate under current good manufacturing practices, or cGMP, regulations;
- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products and harm our business and results of operations.

Any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us. We were previously required to change our third-party manufacturer when the manufacturer was purchased by a third party and exited the contract manufacturing business. The process of changing manufacturers can cause substantial time delays, and if we are required to change our manufacturer again in the future, it may delay our planned clinical trials or development timeline.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. We do not currently have arrangements in place for redundant supply for bulk drug substances. If any one of our current contract manufacturers cannot perform as agreed, we may be required to replace that manufacturer. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to commercialize any medicines that receive marketing approval on a timely and competitive basis.

We may enter into collaborations with third parties for the development or commercialization of our product candidates. If our collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.

We expect to utilize a variety of types of collaboration, distribution and other marketing arrangements with third parties to develop and commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidates for which we obtain marketing approval in markets outside the United States. We also may enter into arrangements with third parties to perform these services in the United States if we do not establish our own sales, marketing and distribution capabilities in the United States for our product candidates or if we determine that such third-party arrangements are otherwise beneficial. We also may seek third-party collaborators for development and commercialization of other product candidates. For example, we may utilize a variety of collaboration, distribution and other marketing arrangements with one or more third parties to facilitate commercialization of KPI-121 0.25% outside the U.S. We may also consider potential collaborative partnership opportunities prior to initiating IND-enabling studies on KPI-285 or any other product candidates we develop through our rTKI program. Our likely collaborators for any sales, marketing, distribution, development, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. We are not currently party to any such arrangement. However, if we do enter into any such arrangements with any third parties in the future, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements.

Collaborations that we enter into may pose a number of risks, including the following:

- collaborators have significant discretion in determining the amount and timing of efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development of our product candidates or may elect not to continue or renew development programs based on results of clinical trials or other studies, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may not pursue commercialization of our product candidates that receive marketing approval or may elect not to continue or renew commercialization programs based on changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;

- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;

- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would divert management attention and resources, be time-consuming and expensive;

- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;

- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and

- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. If any collaborations that we enter into do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our product candidates could be delayed and we may need additional resources to develop our product candidates. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our collaborators.

Additionally, subject to its contractual obligations to us, if a collaborator of ours were to be involved in a business combination, it might de-emphasize or terminate the development or commercialization of any product candidate licensed to it by us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be harmed.

If we are not able to establish collaborations, we may have to alter our development and commercialization plans and our business could be adversely affected.

For some of our product candidates, we may decide to collaborate with pharmaceutical or biotechnology companies for the development and potential commercialization of those product candidates. We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies

for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market or continue to develop our product platform.

Risks Related to Our Intellectual Property

We may be unable to obtain and maintain patent protection for our technology and product candidates, or the scope of the patent protection obtained may not be sufficiently broad or enforceable, such that our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and product candidates may be impaired.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and product candidates. We have sought to protect our proprietary position by filing in the United States and in certain foreign jurisdictions patent applications related to our novel technologies and product candidates.

The patent prosecution process is expensive and time-consuming, and we may not have filed, maintained or prosecuted and may not be able to file, maintain and prosecute all necessary or desirable patents or patent applications at a reasonable cost or in a timely manner. We may also fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

The patent position of pharmaceutical, biotechnology and medical device companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may fail to result in issued patents in the United States or in other foreign countries which protect our technology or product candidates or which effectively prevent others from commercializing competitive technologies and products. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, and the standards applied by the U.S. Patent and Trademark Office and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, unlike patent law in the United States, European patent law precludes the patentability of methods of treatment of the human body and imposes substantial restrictions on the scope of claims it will grant if broader than specifically disclosed embodiments. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain whether we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions. Databases for patents and publications,

and methods for searching them, are inherently limited so we may not know the full scope of all issued and pending patent applications. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or product candidates, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. In particular, during prosecution of any patent application, the issuance of any patents based on the application may depend upon our ability to generate additional preclinical or clinical data that support the patentability of our proposed claims. We may not be able to generate sufficient additional data on a timely basis, or at all. Moreover, changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Even if our owned and licensed patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection for our proprietary technology and product candidates, prevent competitors from competing with us, or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. In particular, a competitor may develop an approach to deliver drugs through the mucus layer to the underlying target tissue that uses a different approach than our MPP technology, and therefore may not infringe on our patent rights.

The issuance of a patent is not conclusive as to its inventorship, ownership, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. 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. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

On September 16, 2011, Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to United States patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The United States Patent Office recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. The first to file provisions limit the rights of an inventor to patent an invention if not the first to file an application for patenting that invention, even if such invention was the first invention. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, which could have a material adverse effect on our business, financial condition, results of operations and prospects. For example, the Leahy-Smith Act provides a new administrative tribunal known as the Patent Trial and Appeals Board, or PTAB, that provides a venue for companies to challenge the validity of competitor patents at a cost that is much lower than district court litigation and on timelines that are much faster. Although it is not clear what, if any, long term impact the PTAB proceedings will have on the operation of our business, the initial results of patent

challenge proceedings before the PTAB since its inception in 2013 have resulted in the invalidation of many U.S. patent claims. The availability of the PTAB as a lower-cost, faster and potentially more potent tribunal for challenging patents could therefore increase the likelihood that our own patents will be challenged, thereby increasing the uncertainties and costs of maintaining, defending and enforcing them.

If we are not able to obtain patent term extension in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the term of our marketing exclusivity for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, one of the U.S. patents covering each of such product candidates or the use thereof may be eligible for up to five years of patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act allows a maximum of one patent to be extended per FDA approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension also may be available in certain foreign countries upon regulatory approval of our product candidates. Nevertheless, we may not be granted patent term extension either in the United States or in any foreign country because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than we request.

If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product may be shortened and our competitors may obtain approval of competing products following our patent expiration sooner, and our revenue could be reduced, possibly materially.

It is possible that we will not obtain patent term extension under the Hatch-Waxman Act for a U.S. patent covering one of our product candidates even where that patent is eligible for patent term extension, or if we obtain such an extension, it may be for a shorter period than we had sought. Further, for our licensed patents, we do not have the right to control prosecution, including filing with the U.S. Patent and Trademark Office, a petition for patent term extension under the Hatch-Waxman Act. Thus, if one of our licensed patents is eligible for patent term extension under the Hatch-Waxman Act, we may not be able to control whether a petition to obtain a patent term extension is filed, or obtained, from the U.S. Patent and Trademark Office.

Also, there are detailed rules and requirements regarding the patents that may be submitted to the FDA for listing in the Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book. We may be unable to obtain patents covering our product candidates that contain one or more claims that satisfy the requirements for listing in the Orange Book. Even if we submit a patent for listing in the Orange Book, the FDA may decline to list the patent, or a manufacturer of generic drugs may challenge the listing. If one of our product candidates is approved and a patent covering that product candidate is not listed in the Orange Book, a manufacturer of generic drugs would not have to provide advance notice to us of any Abbreviated New Drug Application filed with the FDA to obtain permission to sell a generic version of such product candidate.

We also intend to seek pediatric exclusivity for certain of our product candidates, including KPI-121 1.0%. Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application. We cannot provide any assurance that pediatric exclusivity will be obtained for any of our product candidates.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming and unsuccessful.

Competitors and other third parties may infringe, misappropriate or otherwise violate our owned and licensed patents, trade secrets, or other intellectual property. As a result, to counter infringement, misappropriation or unauthorized use, we may be required to file infringement or misappropriation claims or other intellectual property related proceedings, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents or that our asserted patents are invalid. In addition, in a patent infringement or other intellectual property related proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. 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, and could put any of our patent applications at risk of not yielding an issued patent. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information or trade secrets could be compromised by disclosure during this type of litigation.

We may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or become involved in other contested proceedings such as opposition, derivation, reexamination, *inter partes* review, post-grant review or interference proceedings in the United States or elsewhere, challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or product candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

In the United States, the FDA does not prohibit clinicians from prescribing an approved product for uses that are not described in the product's labeling. Although use of a product directed by off-label prescriptions may infringe our method-of-treatment patents, the practice is common across medical specialties, particularly in the United States, and such infringement is difficult to detect, prevent or prosecute.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability to develop, manufacture, market and sell KPI-121 1.0%, KPI-121 0.25% and other product candidates and use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and other proprietary rights of third parties. There is a considerable amount of intellectual property litigation in the biotechnology and pharmaceutical industries. We may become party to, or threatened with,

infringement litigation claims regarding our products and technology, including claims from competitors or from non-practicing entities that have no relevant product revenue and against whom our own patent portfolio may have no deterrent effect. Moreover, we may become party to future adversarial proceedings or litigation regarding our patent portfolio or the patents of third parties. Such proceedings could also include contested post-grant proceedings such as oppositions, *inter partes* review, reexamination, interference or derivation proceedings before the U.S. Patent and Trademark Office or foreign patent offices. For example, we are aware of a third-party European patent that contains claims related to use of loteprednol etabonate, LE, for the treatment of moderate to severe dry eye disease and the use of LE for reducing conjunctival redness associated with dry eye disease. This European patent will expire in early 2025, and is in force in Germany, the United Kingdom, Spain, Italy, and France. There is no United States counterpart patent or pending U.S. patent application. While we have obtained an opinion of European counsel that this patent is invalid, until this patent expires or a court of competent jurisdiction finally determines the patent is invalid in each country, the patent holder may be able to block our ability to develop and commercialize KPI-121 0.25% for the treatment of dry eye disease in Europe unless we obtain a license under this patent in each country where it is in force. Such a license may not be available on commercially reasonable terms or at all. If we are unable to invalidate the patent in each country or obtain a license on commercially reasonable terms, our ability to commercialize KPI-121 0.25% for the treatment of dry eye disease in Europe may be impaired, delayed or halted altogether.

The legal threshold for initiating litigation or contested proceedings is low, so that even lawsuits or proceedings with a low probability of success might be initiated and require significant resources to defend. Litigation and contested proceedings can also be expensive and time-consuming, and our adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we can. The risks of being involved in such litigation and proceedings may increase as our product candidates near commercialization and as we gain the greater visibility associated with being a public company. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. We may not be aware of all such intellectual property rights potentially relating to our product candidates and their uses. Thus, we do not know with certainty that KPI-121 1.0%, KPI-121 0.25% or any other product candidates, or our development and commercialization thereof, do not and will not infringe or otherwise violate any third party's intellectual property.

If we are found to infringe, misappropriate or otherwise violate a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us and could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent and could be forced to indemnify our customers or collaborators. A finding of infringement could also result in an injunction that prevents us from commercializing our product candidates or forces us to cease some of our business operations, which could materially harm our business. In addition, we may be forced to redesign our product candidates, seek new regulatory approvals and indemnify third parties pursuant to contractual agreements. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

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

Periodic maintenance, renewal and annuity fees on any issued patent must be paid to the U.S. Patent and Trademark Office and foreign patent agencies in several stages or annually over the lifetime of our owned and licensed patents and patent applications. The U.S. Patent and Trademark Office and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In certain circumstances, we rely on our licensing partners to pay these fees to, or comply with the procedural and documentary rules of, the relevant patent agency. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, it would have a material adverse effect on our business.

KPI-121 1.0%, KPI-121 0.25% and certain aspects of our MPP technology are protected by patents exclusively licensed from other companies or institutions. If these third parties terminate their agreements with us or fail to maintain or enforce the underlying patents, or we otherwise lose our rights to these patents, our competitive position and our market share in the markets for any of our approved products will be harmed.

A substantial portion of our patent portfolio is in-licensed. As such, we are a party to license agreements and certain aspects of our business depend on patents and/or patent applications owned by other companies or institutions. In particular, we hold exclusive licenses for patent families relating to KPI-121 1.0% and KPI-121 0.25%, other product candidates and some aspects of our MPP technology. While we control patent prosecution of the jointly-owned patent family relating to KPI-121 1.0%, KPI-121 0.25%, for the remainder of the patent families subject to our exclusive license agreement with JHU that relate to our MPP technology, JHU retains control of patent prosecution. Our rights with respect to in-licensed patents and patent applications may be lost if the applicable license agreement expires or is terminated. We are likely to enter into additional license agreements to in-license patents and patent applications as part of the development of our business in the future, under which we may not retain control of the preparation, filing, prosecution, maintenance, enforcement and defense of such patents. If we are unable to maintain these patent rights for any reason, our ability to develop and commercialize our product candidates could be materially harmed.

Our licensors may not successfully prosecute certain patent applications, the prosecution of which they control, under which we are licensed and on which our business depends. Even if patents issue from these applications, our licensors may fail to maintain these patents, may decide not to pursue litigation against third-party infringers, may fail to prove infringement, or may fail to defend against counterclaims of patent invalidity or unenforceability.

Risks with respect to parties from whom we have obtained intellectual property rights may also arise out of circumstances beyond our control. In spite of our best efforts, our licensors might conclude that we have materially breached our intellectual property agreements and might therefore terminate the intellectual property agreements, thereby removing our ability to obtain regulatory approval and to market products covered by these intellectual property agreements. If our intellectual property agreements are terminated, or if the underlying patents fail to provide the intended market exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products similar or identical to ours. Moreover, if our intellectual property agreements are terminated, our former licensors

and/or assignors may be able to prevent us from utilizing the technology covered by the licensed or assigned patents and patent applications. This could have a material adverse effect on our competitive business position and our business prospects

Some intellectual property which we own or have licensed may have been discovered through government funded programs and thus may be subject to federal regulations such as "march-in" rights, certain reporting requirements, and a preference for United States industry. Compliance with such regulations may limit our exclusive rights, subject us to expenditure of resources with respect to reporting requirements, and limit our ability to contract with non-U.S. manufacturers.

Some of the intellectual property rights we own or have licensed have been generated through the use of United States government funding and may therefore be subject to certain federal regulations. For example, certain aspects of our MPP technology as well as certain aspects of our patents that use LE as an active ingredient were developed using United States government funds. As a result, the United States government may have certain rights to intellectual property embodied in our current or future products and product candidates based on our MPP technology or that use LE as an active ingredient pursuant to the Bayh-Dole Act of 1980. These United States government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the United States government has the right to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (i) adequate steps have not been taken to commercialize the invention; (ii) government action is necessary to meet public health or safety needs; or (iii) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in rights"). The United States government also has the right to take title to these inventions if we fail to disclose the invention to the government and fail to file an application to register the intellectual property within specified time limits. In addition, the United States government may acquire title to these inventions in any country in which a patent application is not filed within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the United States government requires that any products embodying the subject invention or produced through the use of the subject invention be manufactured substantially in the United States. The manufacturing preference requirement can be waived if the owner of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for United States manufacturers may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property. Any exercise by the government of any of the foregoing rights could harm our competitive position, business, financial condition, results of operations and prospects.

If we fail to comply with our obligations in our intellectual property licenses and funding arrangements with third parties, we could lose rights that are important to our business.

Our license agreement with JHU, under which we license certain of our patent rights and a significant portion of the technology for KPI-121 1.0%, KPI-121 0.25% and other product candidates, imposes royalty and other financial obligations on us and other substantial performance obligations. We also may enter into additional licensing and funding arrangements with third parties that may impose diligence, development and commercialization timelines and milestone payment, royalty, insurance and other obligations on us. If we fail to comply with our obligations under current or future license and collaboration agreements, our counterparties may have the right to terminate these agreements, in which event we might not be able to develop, manufacture or market any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could diminish

the value of our product. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

In addition it is possible that JHU may conclude that we have materially breached the JHU licensing agreement and might therefore terminate the agreement, thereby removing our ability to obtain regulatory approval for, and to market, products covered by our license agreement with JHU. If the JHU licensing agreement is terminated, or if the underlying patents fail to provide the intended market exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products similar or identical to ours. Moreover, if our license agreement with JHU is terminated, JHU and/or its assignors may be able to prevent us from utilizing the technology covered by the licensed or assigned patents and patent applications. If we breach the agreement (including by failing to meet our payment obligations) and do not adequately cure such breach, the rights in the technology licensed to us under the JHU license agreement, including JHU's rights in our jointly owned patent rights, will revert to JHU at no cost to JHU. This could have a material adverse effect on our competitive business position and our business prospects.

In addition, the agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

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

Filing, prosecuting, and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection or licenses but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages

or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our and our licensors' employees and contractors were previously employed at other biotechnology, medical device or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees and contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Furthermore, we are unable to control whether our licensors have obtained similar assignment agreements from their own employees and contractors. Our and their assignment agreements may not be self-executing or may be breached, and we or our licensors may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we or our licensors fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel which could have a material adverse effect on our competitive business position and prospects. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products, which may not be available on commercially reasonable terms or at all. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

Intellectual property litigation or other legal proceedings relating to intellectual property could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and may also

have an advantage in such proceedings due to their more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have an adverse effect on our ability to compete in the marketplace.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Risks Related to Regulatory Approval of Our Product Candidates and Other Legal Compliance Matters

If we are not able to obtain required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate significant revenue will be materially impaired. The marketing approval process is expensive, time-consuming and uncertain. As a result, we cannot predict when or if we, or any collaborators we may have in the future, will obtain marketing approval to commercialize our product candidates.

Our product candidates, including KPI-121 1.0% and KPI-121 0.25%, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries.

Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market KPI-121 1.0%, KPI-121 0.25% or any other product candidate from regulatory authorities in any jurisdiction. We have only limited experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party consultants and vendors to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. The FDA or other regulatory authorities may determine that KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we develop is not effective, is only moderately effective or has undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If we experience delays in obtaining approval or if we fail to obtain approval of KPI-121 1.0%, KPI-121 0.25% or any other product candidate that we develop, the commercial prospects for such product candidate may be harmed and our ability to generate revenues will be materially impaired.

Failure to obtain marketing approval in foreign jurisdictions would prevent our product candidates from being marketed abroad.

In order to market and sell KPI-121 1.0%, KPI-121 0.25% or other product candidates in the European Union and many other jurisdictions, we or our potential third-party collaborators, must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. Regulatory authorities outside the United States, in particular in the European Union, have not issued guidance on the requirements for approval of a dry eye drug. Our Phase 3 clinical trials of KPI-121 0.25% may not be sufficient to support an application for marketing approval outside the United States.

The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be sold in that country. We or our potential collaborators may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market.

Additionally, on June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. On March 29, 2017, the United Kingdom formally notified the European Union of its intention to withdraw pursuant to Article 50 of the Lisbon Treaty. Since a significant proportion of the regulatory framework in the United Kingdom is derived from European Union directives and regulations, the withdrawal could materially impact the regulatory regime with respect to the approval of our product candidates in the United Kingdom or the European Union. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, would prevent us from commercializing our product candidates in the United Kingdom and/or the European Union and restrict our ability to generate revenue and achieve and sustain profitability. If any of these outcomes occur, we may be forced to restrict or delay efforts to seek regulatory approval in the United Kingdom and/or European Union for our product candidates, which could significantly and materially harm our business.

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. 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. Promotional communications with respect to drug products and medical devices are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, if any of our product candidates receives marketing approval, the accompanying label may limit the approved use of our product, which could limit sales of the product.

The FDA may also impose requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product, including the adoption and implementation of risk evaluation and mitigation strategies. 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. Violations of the Federal Food, Drug, and Cosmetic Act relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may have various consequences, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions and warnings in the labeling and marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenue;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance can also result in significant financial penalties. Similarly, failure to comply with the European Union's requirements regarding the protection of personal information can lead to significant penalties and sanctions.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements, including ensuring that quality control and manufacturing

procedures conform to cGMPs applicable to drug manufacturers or quality assurance standards applicable to medical device 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 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.

We may be subject to substantial penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products.

Violations of the Federal Food, Drug, and Cosmetic Act relating to the promotion or manufacturing of drug products or medical devices may lead to investigations by the FDA, Department of Justice and state Attorneys General alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws. In addition, later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of our products;
- product seizure or detention; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance with European Union requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties.

Our relationships with customers and third-party payors may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security, and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, clinicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription and use of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain

the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by U.S. federal and state governments and by governments in foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include:

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

- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal False Claims Act, which impose criminal and civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, and their respective implementing regulations, which imposes obligations, including mandatory contractual terms, on covered healthcare providers, health plans and healthcare clearinghouses, as well as their business associates, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers, state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to clinicians and other healthcare providers or marketing expenditures, and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the clinicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including exclusions from participation in government funded healthcare programs.

Recently enacted and future legislation may affect our ability to commercialize and the prices we obtain for any products that are approved in the United States or foreign jurisdictions.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could affect our ability to profitably sell or commercialize KPI-121 1.0%, KPI-121 0.25% or any other product candidate for which we obtain marketing approval. The pharmaceutical industry has been a particular focus of these efforts and have been significantly affected by legislative initiatives. Current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any FDA approved product.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for clinician administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the ACA. Among the provisions of the ACA of importance to our business, including, without limitation, our ability to commercialize and the prices we may obtain for any of our product candidates and that are approved for sale, are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- a new Medicare Part D coverage gap discount program, in which participating manufacturers must agree to offer 50% point-of-sale discounts off negotiated drug prices during the coverage gap period as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- expansion of healthcare fraud and abuse laws, including the federal False Claims Act and the federal Anti-Kickback Statute, and the addition of new government investigative powers, and enhanced penalties for noncompliance;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs; and
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program.

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. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2024 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers 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 and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

With the new Administration and Congress, there may be additional legislative changes, including potentially repeal and replacement of certain provisions of the ACA. It remains to be seen, however, whether new legislation will be enacted and, if so, precisely what any new legislation could provide and what impact it will have on the availability of healthcare and containing or lowering the cost of healthcare. For example, it is possible that any repeal and replacement initiatives, if enacted into law, could ultimately result in fewer individuals having health insurance coverage or in individuals having insurance coverage with less generous benefits. The timing and scope of any potential future legislation to repeal and replace ACA provisions is highly uncertain in many respects.

Accordingly, such reforms, if enacted, could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain marketing approval and may affect our overall financial condition and ability to develop or commercialize product candidates. We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and additional downward pressure on the price that we receive for any approved product and/or the level of reimbursement physicians receive for administering any approved product we might bring to market. Reductions in reimbursement levels may negatively impact the prices we receive or the frequency with which any products we may develop are prescribed or administered. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

The costs of prescription pharmaceuticals in the United States has also been the subject of considerable discussion in the United States, and members of Congress and the Administration have stated that they will address such costs through new legislative and administrative measures. The pricing of prescription pharmaceuticals is also subject to governmental control outside the United States. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidates to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our ability to generate revenues and become profitable could be impaired.

If we or any third-party manufacturers we engage in the future fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur significant costs.

We and any third-party manufacturers we may engage in the future 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 materials, including chemicals and biological materials, and produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of 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.

Although we maintain general liability insurance as well as 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, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

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

Further, with respect to the operations of any future third-party contract manufacturers, it is possible that if they fail to operate in compliance with applicable environmental, health and safety laws and regulations or properly dispose of wastes associated with our products, we could be held liable for any resulting damages, suffer reputational harm or experience a disruption in the manufacture and supply of our product candidates or products.

We are subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, be precluded from developing manufacturing and selling certain products outside the United States or be required to develop and implement costly compliance programs,, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the U.K. Bribery Act 2010, or Bribery Act, the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Bribery Act, FCPA and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. Compliance with the FCPA, in particular, is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, FCPA or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. If we expand our operations outside of the United States, we will need to dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union, including applicable export control regulations, economic sanctions on countries and persons, customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws. In addition, various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of

information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. The Securities and Exchange Commission also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions. Any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by U.K., U.S. or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Mark Iwicki, our Chief Executive Officer, Charlie McDermott, our President and Chief Business Officer, Kim Brazzell, Ph.D., our Chief Medical Officer, and Hongming Chen, Sc.D., our Chief Scientific Officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing, legal and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We expect to expand our development, regulatory and manufacturing capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, clinical, regulatory affairs, manufacturing, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and our limited experience in managing such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Risks Related to Our Common Stock and This Offering

After this offering, our executive officers, directors and principal stockholders, if they choose to act together, will continue to have the ability to control all matters submitted to stockholders for approval.

Upon the closing of this offering, our executive officers and directors and our stockholders who owned more than 5% of our outstanding common stock before this offering will, in the aggregate, beneficially own shares representing approximately % of our capital stock. As a result, if these stockholders were to choose to act together, they would be able to control all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets.

This concentration of voting power may:

- delay, defer or prevent a change in control;
- entrench our management and our board of directors; or
- delay or prevent a merger, consolidation, takeover or other business combination involving us on terms that other stockholders may desire.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of our company that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;

- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a "poison pill" that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 75% of the votes that all our stockholders would be entitled to cast to amend or repeal specified provisions of our certificate of incorporation or bylaws that will become effective upon the closing of this offering.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.

The initial public offering price of our common stock will be substantially higher than the pro forma net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our pro forma net tangible book value per share after this offering. To the extent outstanding options or warrants are exercised, you will incur further dilution. 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, you will experience immediate dilution of $ per share, representing the difference between our pro forma net tangible book value per share, after giving effect to this offering, and the assumed initial public offering price.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters. Although we applied to have our common stock approved for listing on The NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all.

The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock in this offering.

Our stock price is likely to be volatile. The stock market in general and the market for smaller biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may

not be able to sell your common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including:

- results of clinical trials of KPI-121 1.0%, KPI-121 0.25% and any other product candidates;
- results of clinical trials of product candidates of our competitors;
- our success in commercializing KPI-121 1.0% and KPI-121 0.25%;
- the success of competitive products or technologies;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key scientific or management personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional products, product candidates or technologies for the treatment of ophthalmic diseases or conditions, the costs of commercializing any such products and the costs of development of any such product candidates or technologies;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

In the past, following periods of volatility in the market price of a company's securities, securities class-action litigation has often been instituted against that company. We also may face securities class-action litigation if we cannot obtain regulatory approvals for or if we otherwise fail to commercialize KPI-121 1.0%, KPI-121 0.25% or other product candidates. Such litigation, if instituted against us, could cause us to incur substantial costs to defend such claims and divert management's attention and resources.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could

reduce the market price of our common stock. After this offering, we will have shares of common stock outstanding based on the number of shares outstanding as of February 28, 2017. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates or existing stockholders. The remaining shares are currently restricted as a result of securities laws or lock-up agreements but will become eligible to be sold at various times after the offering. Moreover, beginning 180 days after the completion of this offering, holders of an aggregate of 83,863,957 shares of our common stock will have rights, along with holders of an additional 7,872,633 shares of our common stock issuable upon exercise of outstanding warrants and options, subject to specified conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company for up to five years. As an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements in this prospectus, 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;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting obligations in this prospectus. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if 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 incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the

listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

For as long as we remain an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies as described in the preceding risk factor. We may remain an emerging growth company until the end of the fiscal year in which the fifth anniversary of this offering occurs, although if the market value of our common stock that is held by non-affiliates exceeds $700 million as of any June 30 before that time or if we have annual gross revenues of $1 billion or more in any fiscal year, we would cease to be an emerging growth company as of December 31 of the applicable year. We also would cease to be an emerging growth company if we issue more than $1 billion of non-convertible debt over a three-year period.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses in our internal control over financial reporting, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Because we do not anticipate paying any cash dividends on our capital 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 capital stock. 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 our 2014 Debt Facility preclude us from paying dividends without the lenders' consent, and any future debt agreements that we may enter into may preclude us from paying dividends without the lenders' consent or at all. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "might," "plan," "predict," "project," "target," "potential," "would," "could," "should," "continue" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus include, among other things, statements about:

- our ongoing clinical trials, including our second Phase 3 clinical trial of KPI-121 1.0% in patients with inflammation and pain following cataract surgery and our two Phase 3 clinical trials of KPI-121 0.25% in patients with dry eye disease;
- our plans to develop and commercialize KPI-121 1.0%, KPI-121 0.25% and any other product candidates, if they are approved;
- the timing of and our ability to submit applications for, obtain and maintain regulatory approvals for KPI-121 1.0%, KPI-121 0.25% and other product candidates;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash on hand and proceeds of this offering;
- the potential advantages of our product candidates;
- the rate and degree of market acceptance and clinical utility of our products;
- our estimates regarding the potential market opportunity for our product candidates;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- our expectations related to the use of proceeds from this offering;
- our estimates regarding expenses, future revenue, timing of any future revenue, capital requirements and needs for additional financing;
- the impact of government laws and regulations;
- our competitive position;
- developments relating to our competitors and our industry;
- our ability to maintain and establish collaborations or obtain additional funding; and
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus, particularly in the "Risk Factors" section, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking

statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this prospectus are made as of the date of this prospectus, and we do not assume any obligation to update any forward-looking statements except as required by applicable law.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties as well as our own estimates of potential market opportunities. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research and other surveys, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of shares of our common stock in this offering will be approximately $ million, assuming an 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, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares of our common stock in full, we estimate that the net proceeds from this offering will be approximately $ million.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

As of December 31, 2016, we had cash on hand of $45.5 million. We currently estimate that we will use the net proceeds from this offering, together with our existing cash on hand, as follows:

- approximately $ million to fund clinical development of our KPI-121 program, including preparation of NDA submissions for KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery and for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease;
- approximately $ million to prepare for commercialization of KPI-121 1.0% and KPI-121 0.25%, including establishment of a focused, specialty sales force;
- approximately $ million to support the manufacture of a commercial supply of KPI-121;
- approximately $ million to fund other early stage pipeline development programs; and
- the remainder for working capital and other general corporate purposes, including scheduled payments on existing indebtedness and funding the costs of operating as a public company.

This expected use of net proceeds from this offering and our existing cash represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials, the timing of regulatory submissions and the outcome of regulatory review, as well as any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our planned use of the net proceeds from this offering and our existing cash described above, we estimate that such funds will be sufficient to enable us to . We do not anticipate that the net proceeds from this offering together with our existing cash will be sufficient to allow us to .

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. In addition, our ability to pay cash dividends is currently restricted by the terms of our 2014 Debt Facility, and future debt financing arrangements may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on then-existing conditions, including our results of operations, financial condition, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and capitalization as of December 31, 2016:

- on an actual basis;
- on a pro forma basis to give effect to: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 83,863,957 shares of common stock upon closing of this offering; (ii) the automatic conversion of outstanding warrants to purchase shares of our preferred stock into warrants to purchase 1,052,222 shares of our common stock upon closing of this offering; (iii) the automatic conversion upon closing of this offering of outstanding warrants to purchase shares of our preferred stock into warrants to purchase 251,951 shares of our common stock that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility; and (iv) the filing and effectiveness of our amended and restated certificate of incorporation upon closing of this offering.
- 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 public offering price of $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information together with our financial statements and related notes appearing at the end of this prospectus and the information set forth under the headings "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	As of December 31, 2016		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands, except share and per share amounts)		
Cash	$ 45,472	$ 45,472	$
Long-term debt-less current portion	9,098	9,098	
Warrant liability	1,039	—	
Convertible preferred stock (Seed, Series A, B, B-1 and C), $0.001 par value, 170,336,260 shares authorized, 83,863,957 shares issued or outstanding, actual; no shares authorized, issued or outstanding pro forma and pro forma as adjusted	118,391	—	
Stockholders' deficit:			
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	—	—	
Common stock, $0.001 par value per share; 110,251,951 shares authorized, 6,153,300 shares issued and outstanding, actual; shares authorized, 90,017,257 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	6	90	
Additional paid-in capital	4,369	123,715	
Accumulated deficit	(92,137)	(92,137)	
Total stockholders' (deficit) equity	(87,762)	31,668	
Total capitalization	$ 40,766	$ 40,766	

A $1.00 increase (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 page of this prospectus, would increase (decrease) each of cash, additional paid-in capital, total capitalization and total stockholders' equity, in each case on a pro forma as adjusted basis by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering costs payable by us. An increase (decrease) of 1.0 million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) each of cash, additional paid-in capital, total capitalization and total stockholders' equity, in each case on a pro forma as adjusted basis by approximately $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of common stock issued and outstanding, actual, pro forma and pro forma as adjusted in the table above excludes the following shares:

- 16,643,128 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2016 under the 2009 Plan at a weighted average exercise price of $0.62 per share;
- 1,761,742 shares of common stock reserved for future issuance under the 2009 Plan as of December 31, 2016;
- additional shares of our common stock that will be available for future issuance, as of the closing of this offering, under our 2017 Plan;
- 1,052,222 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of December 31, 2016, at a weighted average exercise price of $1.41 per share; and
- 251,951 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of December 31, 2016, that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility at a weighted average exercise price of $1.59 per share.

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.

Our historical net tangible book value as of December 31, 2016 was $30.3 million, or $4.92 per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities. Historical net tangible book value per share represents historical net tangible book value divided by the 6,153,300 shares of our common stock outstanding as of December 31, 2016.

Our pro forma net tangible book value as of December 31, 2016 was $31.3 million, or $0.35 per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 83,863,957 shares of common stock upon the closing of this offering; (ii) the automatic conversion of outstanding warrants to purchase preferred stock into warrants to purchase 1,052,222 shares of our common stock upon the closing of this offering; and (iii) the automatic conversion upon the closing of this offering of outstanding warrants to purchase shares of our preferred stock into warrants to purchase 251,951 shares of our common stock that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of December 31, 2016, after giving effect to the pro forma adjustments described in (i), (ii) and (iii) above.

After giving effect to our issuance and 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 page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2016 would have been $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution of $ per share in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Historical net tangible book value per share as of December 31, 2016	$ 4.92	
Decrease in pro forma net tangible book value per share as of December 31, 2016 attributable to pro forma adjustments	(4.57)	
Pro forma net tangible book value per share as of December 31, 2016	$ 0.35	
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution of pro forma net tangible book value per share to new investors		$

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 page of this prospectus, would increase or decrease our pro forma as adjusted net tangible book value by $ million, our 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 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. An increase of 1.0 million shares 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 shares 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 in full their option to purchase additional shares, our pro forma as adjusted net tangible book value per share after this offering would be $ per share, representing an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution of $ in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering, assuming an 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.

The following table summarizes, as of December 31, 2016, on a pro forma as adjusted basis described above, the total number of shares purchased from us on an as converted to common stock basis, the total consideration paid, or to be paid, and the average price per share paid, or to be paid, by existing stockholders and by new investors 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 page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing shares in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
	(in thousands, except share and per share amounts)				
Existing stockholders			$		$
Investors purchasing common stock in this offering					
Total		100%	$	100%	

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 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, 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 shares 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, assuming no change in the assumed initial public offering price.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is fully exercised, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to % of the total number of shares of our common stock outstanding after this offering.

The foregoing discussion and tables are based on the number of shares of common stock outstanding as of December 31, 2016, and exclude:

- 16,643,128 shares of common stock issuable upon exercise of stock options outstanding as of December 31, 2016 under the 2009 Plan at a weighted average exercise price of $0.62 per share;
- 1,761,742 shares of common stock reserved for future issuance under the 2009 Plan as of December 31, 2016;
- additional shares of our common stock that will be available for future issuance, as of the closing of this offering, under our 2017 Plan;
- 1,052,222 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of December 31, 2016, at a weighted average exercise price of $1.41 per share; and
- 251,951 shares of common stock issuable following the closing of this offering upon the exercise of outstanding warrants as of December 31, 2016 that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility at a weighted average exercise price of $1.59 per share.

SELECTED FINANCIAL DATA

The selected financial data as of and for the years ended December 31, 2015 and 2016 have been derived from our audited financial statements appearing at the end of this prospectus. You should read this data together with our historical 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" sections of this prospectus. Our historical results are not necessarily indicative of our future results. The selected financial data in this section are not intended to replace our audited financial statements and related notes appearing at the end of this prospectus.

	Year Ended December 31,	
	2015	2016
	(in thousands, except share and per share amounts)	
Revenue	$ 45	$ —
Operating expenses		
Research and development	11,382	25,029
General and administrative	4,609	7,640
Total operating expenses	15,991	32,669
Loss from operations	(15,946)	(32,669)
Other income(expense)		
Interest income	—	147
Interest expense	(604)	(767)
Change in fair value of warrant liability	(132)	122
Net loss attributable to common stockholders—basic and diluted	$ (16,682)	$ (33,167)
Net loss per share attributable to common stockholders—basic and diluted	$ (2.86)	$ (5.39)
Weighted average shares outstanding—basic and diluted	5,834,766	6,153,300
Pro forma net loss per share attributable to common stockholders—basic and diluted (unaudited)(2)		$ (0.42)
Pro forma weighted average shares outstanding—basic and diluted (unaudited)(2)		78,678,676

	As of December 31, 2016	
	2015	2016
	(in thousands)	
Balance Sheet Data:		
Cash	$ 5,759	$ 45,472
Total assets	8,448	46,329
Working capital(1)	2,094	40,080
Long-term debt—less current portion	7,795	9,098
Warrant liability	936	1,039
Other long-term liabilities	3	17
Convertible preferred stock	50,871	118,391
Total stockholders' deficit	(56,664)	(87,762)

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

(2) The pro forma information gives effect to:

- the automatic conversion of all outstanding shares of our preferred stock into 83,863,957 shares of common stock upon the closing of this offering;
- the automatic conversion of outstanding warrants to purchase preferred stock into warrants to purchase 1,052,222 shares of common stock upon the closing of this offering;
- the automatic conversion upon the closing of this offering of outstanding warrants to purchase preferred stock into warrants to purchase 251,951 shares of common stock that become exercisable only upon our draw down of the remaining $10.0 million of available borrowings under our 2014 Debt Facility; and
- the filing and effectiveness of our amended and restated certificate of incorporation upon the closing of this offering.

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 thereto appearing at the end of 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. See "Special Note Regarding Forward-Looking Statements and Industry Data." Because 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.

Overview

We are a biopharmaceutical company focused on the development and commercialization of therapeutics using our proprietary nanoparticle-based Mucus Penetrating Particles, or MPP, technology, with an initial focus on the treatment of eye diseases. Our MPPs are selectively-sized nanoparticles and have proprietary coatings. We believe that these two key attributes enable even distribution of drug particles on mucosal surfaces and significantly increase drug delivery to target tissues by enhancing mobility of drug particles through mucus and preventing drug particles from becoming trapped and eliminated by mucus. KPI-121, our lead program, consists of topically applied MPP nanosuspensions of loteprednol etabonate, or LE, a corticosteroid designed for ocular applications. Under our KPI-121 program, we have two product candidates in Phase 3 clinical development, one for the treatment of inflammation and pain following ocular surgery and one for the temporary relief of the signs and symptoms of dry eye disease.

We have completed a Phase 3 clinical trial of KPI-121 1.0%, our twice-a-day product candidate, in patients with inflammation and pain following cataract surgery, which is the most common type of ocular surgery in the United States. Commonly used topical ocular corticosteroid products for the treatment of post-operative inflammation and pain are approved for dosing four times a day. In June 2016, we initiated a second Phase 3 clinical trial of KPI-121 1.0%, and we have completed the enrollment phase with 520 patients enrolled. We expect to receive topline results of this clinical trial in the second quarter of 2017. Assuming positive results from this Phase 3 clinical trial, we anticipate filing a new drug application, or NDA, for the approval of KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery by the end of 2017. KPI-121 0.25% is our product candidate for patients with dry eye disease utilizing a two-week course of therapy. After achieving positive results in a Phase 2 clinical trial, we initiated two parallel Phase 3 clinical trials of KPI-121 0.25% in June 2016. Each of these Phase 3 clinical trials has a target enrollment of at least 900 dry eye patients and had enrolled over 500 dry eye patients as of March 15, 2017. We expect to receive topline results from these clinical trials by the end of 2017. Assuming positive results from these Phase 3 clinical trials, we anticipate filing an NDA for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018. We also are evaluating compounds in our topically applied MPP receptor Tyrosine Kinase Inhibitor program, or rTKI program, that inhibit the vascular endothelial growth factor, or VEGF, pathway, for the potential treatment of a number of retinal diseases.

For both KPI-121 product candidates, we plan to rely on the potentially more expeditious pathway to U.S. Food and Drug Administration, or the FDA, approval under Section 505(b)(2) of the U.S. Federal Food, Drug and Cosmetic Act, or the FDCA. Based on our discussions with European Union, or EU, regulatory authorities, if the results of our ongoing Phase 3 dry eye disease trials are positive, we believe that we will be able to utilize the results from these trials to support a submission of a

Marketing Authorization Application, or MAA, for KPI-121 0.25% for the short-term treatment of dry eye disease in the EU through the Article 10(3) submission pathway.

After synthesizing and testing a number of new chemical entities, or NCEs, from our topically applied rTKI program, we are further evaluating compounds for the potential topical treatment of a number of retinal diseases, including wet age-related macular degeneration, or Wet AMD, Diabetic Retinopathy, or DR, Diabetic Macular Edema, or DME, and Retinal Vein Occlusion, or RVO, each of which involves either the leakage of existing blood vessels or the proliferation of poorly formed and leaky blood vessels at the back of the eye. These eye diseases can significantly reduce vision and eventually lead to blindness. VEGF is a protein that plays a critical role in the formation of new blood vessels and increased permeability, two pathological processes that contribute to the vision loss associated with certain retinal diseases. We are initially targeting Wet AMD with our lead rTKI compound, KPI-285. KPI-285 inhibits the VEGF pathway. In preclinical rabbit studies, topical administration of KPI-285 achieved concentrations in tissues in the back of the eye well above the concentrations required for *in vitro* inhibition of 50% of the VEGF receptor kinase activity. Prior to initiating IND-enabling studies, we may consider potential collaborative partnership opportunities to advance product candidates we develop through our rTKI program, including KPI-285.

Since our inception in July 2009, we have devoted substantial resources to the research and development of nanoparticle-based drug products and our proprietary MPP technology. We have no products approved for sale and all our revenue to date has been derived from feasibility agreements with our collaboration partners. To date, we have funded our operations primarily through private placements of preferred stock, convertible promissory notes and warrants. In addition, we have borrowed under venture debt facilities to fund our operations. Specifically, since our inception and through December 31, 2016, we have raised an aggregate of $131.4 million to fund our operations, of which $113.9 million was from the sale of preferred stock, $6.0 million was from convertible promissory notes and warrants and $11.5 million was from borrowings and warrants under venture debt facilities. As of December 31, 2016, we had cash on hand of $45.5 million.

Since inception, we have incurred significant operating losses. Our net loss was $16.7 million and $33.2 million for the years ended December 31, 2015 and 2016, respectively. We recognized revenue of $45,000 and $0 for the years ended December 31, 2015 and 2016, respectively. We have not generated any revenue from the sale of products. Our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and eventual commercialization of one or more of our current product candidates and programs. Substantially all our operating losses resulted from expenses incurred in connection with our research programs and from general and administrative costs associated with our operations. As of December, 31, 2016, we had an accumulated deficit of $92.1 million. We expect to continue to incur significant and increasing losses in the foreseeable future. Our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if and as we:

- seek marketing approvals for KPI-121 1.0% and KPI-121 0.25% and any other product candidates that successfully complete clinical development;
- pursue the clinical development of KPI-121 product candidates for the treatment of other additional indications or for use in other patient populations or, if approved, seek to broaden the label of KPI-121 1.0% or KPI-121 0.25%;
- pursue the clinical development of product candidate derived from our rTKI program for use in the treatment of retinal diseases, such as AMD, DR, DME and RVO;
- establish sales, marketing and distribution capabilities for our product candidates for which we obtain marketing approval;

- scale up our manufacturing processes and capabilities to support our ongoing clinical trials of our product candidates and commercialization of any of our product candidates for which we obtain marketing approval;
- leverage our proprietary MPP technology to advance high-value therapeutics into preclinical and clinical development;
- in-license or acquire the rights to other products, product candidates or technologies;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, scientific and management personnel;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company; and
- increase our product liability insurance coverage as we expand our commercialization efforts.

We do not expect to generate revenue from product sales until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which is subject to significant uncertainty. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Until such time, if ever, that we generate product revenue, we expect to finance our cash needs through a combination of public or private equity offerings, debt financings and research collaboration and license agreements. We may be unable to raise capital or enter such other arrangements when needed or on favorable terms. Our failure to raise capital or enter such other arrangements as and when needed would have a negative impact on our financial condition and our ability to develop our product candidates.

Financial Operations Overview

Revenue

Our revenue to date has been generated through payments received through feasibility agreements with collaboration partners. For each such agreement, we and our collaboration partners agreed to an investigational study with specified phases and endpoints. These studies were executed according to a predefined work plan. Under the terms of each agreement, we received an upfront payment upon consummation, additional upfront payments upon continuation to future phases after predefined objectives had been met and a final payment upon approval of a final report.

We do not currently anticipate generating any significant additional revenue through feasibility agreements or other collaboration arrangements in the future. If we fail to raise additional capital, obtain regulatory approval of our products or successfully commercialize our products, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

Research and Development Expenses

Research and development expenses consist of costs associated with our research activities, including compensation and benefits for full-time research and development employees, an allocation of facilities expenses, overhead expenses, payments to universities under our license agreements and other outside expenses. Our research and development expenses include:

- employee-related expenses, including salaries, related benefits, travel and stock-based compensation;

- expenses incurred for the preclinical and clinical development of our product candidates and under agreements with contract research organizations, or CROs;
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities and supplies; and
- payments made under our third-party licensing agreements, including our license agreement with Johns Hopkins University, or JHU.

We expense research and development costs as they are incurred. Research and development costs that are paid in advance of performance are capitalized as a prepaid expense until incurred. We track outsourced development costs by development program but do not allocate personnel costs, payments made under our license agreements or other costs to specific product candidates or development programs. These costs are included in Employee-related costs and Other research and development costs in the table below.

The following table summarizes our research and development expenses incurred during the years ended December 31, 2015 and 2016.

	Year Ended December 31,	
	2015	2016
	(in thousands)	
KPI-121 external development costs	$ 4,683	$ 17,465
Employee-related costs	3,485	4,714
Other research and development costs	3,214	2,850
Total research and development	$ 11,382	$ 25,029

We expect our research and development expenses to increase for the foreseeable future as we advance our product candidates toward regulatory approval. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time-consuming. We may never succeed in obtaining marketing approval for any of our product candidates. The probability of success for each product candidate may be affected by numerous factors, including preclinical data, clinical data, competition, manufacturing capability and commercial viability.

Our research and development programs are at various stages of development. Successful development and completion of clinical trials is uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each future product candidate and are difficult to predict. We will continue to make determinations as to which product candidates to pursue and how much funding to direct to each product candidate on an ongoing basis in response to our ability to enter into collaborations with respect to each product candidate, the scientific and clinical success of each product candidate as well as ongoing assessments as to the commercial potential of product candidates. We will need to raise additional capital and may seek collaborations in the future to advance our various product candidates. Additional private or public financings may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a material adverse effect on our financial condition and our ability to pursue our business strategy.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation, related to our executive, finance, legal, business development and support functions. Other general and administrative expenses include travel expenses, professional fees for auditing, tax, consultants and legal services and allocated facility-related costs not otherwise included in research and development expenses.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates. We also anticipate that we will incur increased accounting, audit, legal, regulatory, compliance, director and officer insurance costs as well as investor and public relations expenses associated with being a public company.

Interest Income

Interest income consists of interest earned on our cash balance held in a deposit account.

Interest Expense

Interest expense primarily consists of contractual coupon interest, amortization of debt discounts and debt issuance costs recognized on our debt facility.

Change in Fair Value of Warrant Liability

We recognize gains and losses on the change in the fair value of outstanding warrants to purchase our Series Seed, Series B and Series C preferred stock as a component of other income (expense). We have issued warrants for the purchase of our Series Seed, Series B and Series C preferred stock. These warrants are financial instruments that are issuable for contingently redeemable securities. Therefore, we have classified the warrants as liabilities that we remeasure to fair value at each reporting period, and we record the re-measurement as the change in fair value of warrant liability in the statement of operations. Upon the closing of this offering, the underlying preferred stock will be converted into common stock, the preferred stock warrants will become exercisable for common stock instead of preferred stock, and the fair value of the warrant liability at that time will be reclassified to additional paid-in capital.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our 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 financial statements appearing at the end of this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our financial statements.

Accrued Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses. This process involves reviewing open contracts and purchase orders, 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 the actual cost. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and adjust if necessary. Examples of estimated accrued expenses include fees payable to:

- vendors for clinical development activities;
- salary and employee benefits payable; and
- providers of consulting and related services.

We record accruals related to development activities based on our estimates of the services received and efforts expended pursuant to the terms of our contractual arrangements. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows and expense recognition. Payments under some of these contracts depend on clinical trial milestones. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. In accruing service fees, we estimate the time over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Preferred Stock Warrant Liability

We classify warrants to purchase shares of our Series Seed, Series B and Series C preferred stock as a liability on our balance sheet as the warrants are free-standing financial instruments that are issuable for contingently redeemable securities. The warrants were initially recorded at fair value on the date of grant, and are subsequently remeasured to fair value at each balance sheet date. Changes in the fair value of the warrants are recognized separately in our statement of operations. We will continue to adjust the liability for changes in fair value until the earlier of the exercise, conversion or expiration of the warrant.

We utilize the Black-Scholes option-pricing model, which incorporates assumptions and estimates, to value each preferred stock warrant. We assess these assumptions and estimates on a quarterly basis as additional information impacting the assumptions are obtained. Estimates and assumptions impacting the fair value measurement include the fair value per share of the underlying Series Seed, Series B, and Series C preferred stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield, expected volatility of the price of the underlying preferred stock, and to the extent the exercisable shares underlying the warrants are contingently adjustable, the probability that we will draw down on the remaining debt facility. We determine the fair value per share of the underlying preferred stock by taking into consideration our most recent sales of our preferred stock as well as additional factors that we deem relevant. We have historically been a private company and lack company-specific historical and implied volatility information of our stock. Therefore, we estimate 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 is determined by reference to the U.S. Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrant. We have assumed a 0% dividend yield considering that our board of directors has no history of declaring dividends.

Upon the closing of this offering, the underlying preferred stock will be converted to common stock, the preferred stock warrants will become exercisable for common stock instead of preferred stock, and the fair value of the warrant liability at that time will be reclassified to additional paid-in capital. No further re-measurement of the warrants would occur if the warrants become exercisable for common stock.

Deferred Income Taxes

We file U.S. federal income tax returns and Massachusetts, California, Kentucky, New Hampshire, New York, North Carolina and Pennsylvania state tax returns. Our deferred tax assets were primarily comprised of federal and state tax net operating losses and research and development tax credit

carryforwards and were 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, 2016, the federal and state net operating loss carryforwards were approximately $85.3 million and $80.5 million, respectively, and the federal and state research and development tax credit carryforwards were $2.4 million and $0.5 million, respectively. These tax credits begin to expire in 2030 in the case of the federal tax credits and 2025 in the case of the state tax credits. At December 31, 2016, we had $0 of unrecognized tax benefits.

Utilization of the net operating loss and tax credit carryforwards may be subject to an annual limitation due to historical or future ownership percentage change rules provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of certain net operating loss and tax credit carryforwards before their utilization. However, due to uncertainties surrounding our ability to generate future taxable income to realize these tax assets, a full valuation allowance has been established to offset our deferred tax assets.

Stock-based Compensation and Common Stock Valuation

Stock-based Compensation

We measure stock options and other stock-based awards granted to employees and directors based on the fair value on the date of the grant and recognize the corresponding compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award.

We generally issue stock option awards with service-based vesting conditions and record the expense for these awards using the straight-line method. We measure stock-based awards granted to consultants and non-employees based on the fair value of the award on the date at which the related service is complete. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, we remeasure the fair value of these awards using the then-current fair value of our common stock and updated assumption inputs in the Black-Scholes option pricing model.

Performance-based option awards vest subject to the achievement of performance criteria as determined by management. These criteria are milestone events that are specific to our corporate goals. The grant date and fair value for each award is determined on the date that the performance criteria are established. If, and when, we determine it is probable that the performance condition will be achieved, compensation expense will be recognized from the date of grant through the fiscal year under which the requisite service period has been rendered.

We recognize compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, we considered historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from our estimate, we may be required to record adjustments to stock-based compensation expense in future periods.

We estimate the fair value of each stock option grant using the Black-Scholes option-pricing model, which uses as inputs the fair value of our common stock and assumptions we make for the volatility of our common stock, the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield.

Common Stock Valuation

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 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 of directors' 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 either a hybrid method, which used market approaches to estimate our enterprise value, or a probability-weighted expected return method, or PWERM, which used a combination of market approaches and a cost approach to estimate our enterprise value. The hybrid method is a PWERM where the equity value in one or more of the scenarios is calculated using an option-pricing method, or OPM. Under the PWERM methodology, the fair value of common stock is estimated 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.

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 as of 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 securities senior to our common stock at the time of each grant, the progress of our research and development programs, external market conditions affecting and trends within the biotechnology industry and the likelihood of achieving a liquidity event.

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.

Following the closing of this offering, the fair value of our common stock will be determined based on the quoted market price of our common stock.

The following table summarizes our stock-based compensation for employees and non-employees' expenses incurred during the years ended December 31, 2015 and 2016:

	Year Ended December 31,	
	2015	2016
	(in thousands)	
Research and development	$ 161	$ 461
General and administrative	477	1,608
Total	$ 638	$ 2,069

As of December 31, 2016, we had $4.8 million of total unrecognized compensation expense, net of estimated forfeitures, which is expected to be recognized over a weighted average remaining vesting period of approximately 2.73 years. We expect the impact of our stock-based compensation expense for stock options and restricted stock granted to employees and non-employees to grow in future periods due to the potential increases in the value of our common stock and headcount.

Emerging Growth Company Status

In April 2012, the Jumpstart Our Business Startup Act, or JOBS Act, was enacted by the federal government. Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

Results of Operations

Comparison of the Years Ended December 31, 2015 and 2016

The following table summarizes the results of our operations for the years ended December 31, 2015 and 2016:

	Year Ended December 31,		Increase (Decrease)	
	2015	2016		
	(in thousands)			
Revenue	$ 45	$ —	$ (45)	(100)%
Operating expenses:				
Research and development	11,382	25,029	13,647	120%
General and administrative	4,609	7,640	3,031	66%
Total costs and expenses	15,991	32,669	16,678	104%
Loss from operations	(15,946)	(32,669)	(16,723)	105%
Other income (expense)				
Interest income	—	147	147	100%
Interest expense	(604)	(767)	(163)	27%
Change in fair value of warranty liability	(132)	122	254	(192)%
Net loss	$ (16,682)	$ (33,167)	$ (16,485)	99%

Revenue

Our revenue recognized during 2015 was derived from services performed under feasibility agreements with two collaboration partners that were completed by May 2015. We recognized revenue of $45,000 for the year ended December 31, 2015, compared to $0 for the year ended December 31, 2016. We were not party to any collaboration arrangements during the year ended December 31, 2016, and in the future, we do not anticipate generating any significant additional revenue from feasibility agreements or other collaboration arrangements.

Research and Development Expenses

	Year Ended December 31,		Increase (Decrease)	
	2015	2016		
	(in thousands)			
KPI-121 development costs	$ 4,683	$ 17,465	$ 12,782	273%
Employee-related costs	3,485	4,714	1,229	35%
Other research and development costs	3,214	2,850	(364)	11%
Total research and development	$ 11,382	$ 25,029	$ 13,647	120%

Research and development expenses were $11.4 million for the year ended December 31, 2015, compared to $25.0 million for the year ended December 31, 2016, an increase of $13.6 million, or 120%. This increase is primarily the result of a $12.8 million increase in KPI-121 development costs due to the increase in external costs associated with our second Phase 3 clinical trial of KPI-121 1.0% for the treatment of inflammation and pain following cataract surgery and our two parallel Phase 3 clinical trials of KPI-121 0.25% for the treatment of dry eye disease, all of which began in June 2016. Our KPI-121 external development costs for the year ended December 31, 2015 were comprised primarily of costs associated with our Phase 2 dry eye trial and our first Phase 3 post-operative trial, each of which had fewer patients than our ongoing Phase 3 trials. We incurred a $1.2 million increase in employee-related costs during the year ended December 31, 2016 due to the additional hiring of clinical and regulatory personnel as a result of our progress on the Phase 3 trials, overall merit increases and an increase in stock compensation expense related to stock option grants. These increases were partially offset by a decrease of $0.4 million in other research and development costs. We expect our research and development expenses to continue to increase in the future as we continue spending on our development programs.

General and Administrative Expenses

General and administrative expenses were $4.6 million for the year ended December 31, 2015 compared to $7.6 million for the year ended December 31, 2016, an increase of $3.0 million, or 66%. The increase was primarily due to the write-off of $1.8 million in deferred offering costs resulting from our decision not to update our 2015 confidential S-1 filing during the second quarter of 2016 at which point in time our initial public offering was no longer considered to be probable of being consummated in 2016. We also incurred an increase in employee-related costs of $1.5 million. This was a result of an increase in stock compensation expense due to additional stock option grants, an increase in salaries due to hiring of additional finance and accounting personnel, and the impact of merit-based salary increases. These increases were partially offset by a $0.3 million decrease in our consulting costs as result of hiring permanent accounting and finance personnel. We expect general and administrative expenses to increase in the future as we expand our operating activities and incur additional costs associated with being a public company.

Interest Income

Interest income was $0 for the year ended December 31, 2015 compared to $0.1 million for the year ended December 31, 2016. The increase of $0.1 million was the result of interest income generated on our higher average cash balance for the year ended December 31, 2016 compared to the year ended December 31, 2015, due to the receipt of $67.5 million in net proceeds from our Series C financing in April 2016.

Interest Expense

Interest expense was $0.6 million for the year ended December 31, 2015 compared to $0.8 million for the year ended December 31, 2016, an increase of $0.2 million, or 27%. The higher interest expense during the year ended December 31, 2016 was primarily due to the additional $5.0 million draw of our venture debt facility in July 2015, resulting in a $10.0 million outstanding loan for the year ended December 31, 2016. Additionally, the variable portion of the interest rate applicable to our debt facility increased marginally during 2016, from 3.25% in January 2016 to 3.5% in December 2016.

Change in Fair Value of Warrant Liability

Changes in the fair value of our preferred stock warrants resulted in a $0.1 million loss for the year ended December 31, 2015, as compared to a $0.1 million gain for the year ended December 31, 2016. The gain recognized in the year ended December 31, 2016 was a result of a decrease in the fair

value on the warrants, which was primarily due to the decrease in the fair value of the underlying preferred shares on a period-over-period basis. The loss recognized for the year ended December 31, 2015 was a result of an increase in the fair value of the warrants, which was due primarily to the increase in the fair value of the underlying preferred shares on a period-over-period basis.

Liquidity and Capital Resources

Since our inception, we have incurred significant operating losses. We have derived limited revenue to date from feasibility studies with collaboration partners. We have not yet commercialized any of our product candidates, which are in various phases of clinical development, and we do not expect to generate revenue from sales of any product before 2019, if ever. We have funded our operations to date with proceeds from the sale of preferred stock, borrowings under venture debt facilities, the issuance of convertible promissory notes and warrants and to a lesser extent, payments received in connection with various feasibility studies. Through December 31, 2016, we have received gross proceeds of $131.4 million, which consists of $113.9 million from the sale of preferred stock, $11.5 million from borrowings under venture debt facilities and $6.0 million from the issuance of convertible promissory notes.

On November 20, 2014, we entered into a venture debt facility, or the 2014 Debt Facility, for a total loan commitment of $10.0 million, of which we borrowed $5.0 million upon closing of the loan and another $5.0 million in July 2015. Under the terms of the agreement, the borrowings accrue interest at an annual rate equal to the greater of (i) 3.00% above the prime rate then in effect, or (ii) 6.25%. On October 13, 2016, we entered into a first amendment to the 2014 Debt Facility, or the Amendment. The Amendment reaffirmed the initial commitment of $10.0 million in funding. Additionally, the Amendment increased our borrowing capacity through the commitment of an additional $10.0 million in funding, which we refer to as Term Loan B. The availability of Term Loan B will commence upon receipt of positive results sufficient to support an NDA submission, with no significant treatment-related safety findings, from our second Phase 3 clinical trial of KPI-121 1.0% for the treatment of inflammation and pain following cataract surgery and will continue until October 13, 2017. As of December 31, 2016, no amounts have been drawn against the incremental $10.0 million commitment. The 2014 Debt Facility, as amended on October 13, 2016, provides for interest only payments through October 13, 2017, and matures on October 13, 2020. Interest is payable monthly in arrears through to the maturity date.

Cash Flows

As of December 31, 2016, we had $45.5 million in cash on hand and $10.0 million in indebtedness. The indebtedness represents the aggregate outstanding principal amount under the 2014 Debt Facility.

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

	Year Ended December 31,	
	2015	2016
	(in thousands)	
Net cash used in operating activities	$ (15,089)	$ (27,348)
Net cash used in investing activities	(252)	(153)
Net cash provided by financing activities	10,480	67,214
(Decrease) increase in cash	$ (4,861)	$ 39,713

Operating Activities

We have incurred losses since inception. During the year ended December 31, 2016, our cash used in operating activities was primarily due to our net loss of $33.2 million as we incurred increased

external research and development costs associated with our clinical trials during 2016 and increased general and administrative costs, partially offset by non-cash charges of $2.3 million, consisting primarily of stock-based compensation, the write-off of deferred offering costs related to our confidential 2015 S-1 filing of $1.8 million and net cash provided by changes in our operating assets and liabilities of $1.7 million. Net cash provided by changes in our operating assets and liabilities was primarily due to an increase of $2.1 million in accrued expenses, partially offset by a $0.3 million decrease in accounts payable and a $0.1 million increase in prepaid expenses primarily as a result of prepayments made in connection with medical benefits and corporate insurance policies. The increase in accrued expense was primarily a result of an increase in amounts accrued for patients in the ongoing clinical and the decrease in accounts payable was a result of the timing of vendor invoices and payments.

During the year ended December 31, 2015, our cash used in operating activities was primarily due to our net loss of $16.7 million as we incurred external research and development activities associated with our clinical trials and our general and administrative expenses. The loss was partially offset by non-cash charges of $1.3 million, including $0.6 million of stock-based compensation, and net cash provided by changes in our operating assets and liabilities of $0.3 million. Net cash provided by changes in our operating assets and liabilities was primarily due to an increase of $0.9 million in accounts payable related to the timing of vendor invoices and payments, partially offset by a decrease in accrued expenses of $0.6 million related to payments of development costs and development milestones in 2015.

Investing Activities

Net cash used in investing activities for the years ended December 31, 2015 and 2016 consisted of purchases of property and equipment, primarily laboratory equipment. Purchases of property and equipment were $0.3 million and $0.2 million for the years ended December 31, 2015 and 2016, respectively.

Financing Activities

Net cash provided by financing activities was $67.2 million for the year ended December 31, 2016, consisting of $67.5 million in net proceeds from the issuance of Series C preferred stock, partially offset by the payment of deferred offering costs of $0.3 million related to our confidential 2015 S-1 filing.

Net cash provided by financing activities was $10.5 million for the year ended December 31, 2015, consisting of $6.9 million in net proceeds from the issuance of Series B-1 preferred stock, $5.0 million in net proceeds from the drawdown from the 2014 Debt Facility and proceeds of $0.1 million from the exercise of stock options, partially offset by the payment of deferred offering costs of $1.5 million.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance our preclinical activities and clinical trials. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company.

Our expenses will also increase if and as we:

- seek marketing approvals for KPI-121 1.0% and KPI-121 0.25% and any other product candidates that successfully complete clinical development;
- pursue the clinical development of KPI-121 for the treatment of other additional indications or for use in other patient populations or, if approved, seek to broaden the label of KPI-121 1.0% or KPI-121 0.25%;

- pursue the preclinical and clinical development of product candidates derived from our rTKI program for use in the treatment of retinal diseases, such as AMD, DR, DME and RVO;
- establish sales, marketing and distribution capabilities for our product candidates for which we obtain marketing approval;
- scale up our manufacturing processes and capabilities to support our clinical trials of our product candidates and commercialization of any of our product candidates for which we obtain marketing approval;
- leverage our proprietary MPP technology to advance high-value therapeutics into preclinical and clinical development;
- in-license or acquire the rights to other products, product candidates or technologies;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, quality control, scientific and management personnel;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development, manufacturing and commercialization efforts and our operations as a public company; and
- increase our product liability insurance coverage as we expand our commercialization efforts.

As of December 31, 2016, we had cash on hand of $45.5 million. We believe that the anticipated net proceeds from this offering, together with our existing cash on hand as of December 31, 2016, will enable us to fund our operating expenses and capital expenditure requirements through at least . We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect.

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 progress, costs and results of our ongoing Phase 3 clinical trials for KPI-121 1.0% and KPI-121 0.25% and of any clinical activities for regulatory review of KPI-121 1.0% and KPI-121 0.25% outside of the United States;
- the costs and timing of process development and manufacturing scale-up activities associated with KPI-121 1.0% and KPI-121 0.25%;
- the costs, timing and outcome of regulatory review of KPI-121 1.0% and KPI-121 0.25%;
- the costs of commercialization activities for KPI-121 1.0% and KPI-121 0.25% if we receive, or expect to receive, marketing approval, including the costs and timing of establishing product sales, marketing, distribution and outsourced manufacturing capabilities;
- subject to receipt of marketing approval, revenue received from commercial sales of KPI-121 1.0% and KPI-121 0.25%;
- our ability to establish and maintain strategic collaborations, licensing or other agreements and the financial terms of such agreements;
- the scope, progress, results and costs of any product candidates that we may derive from our rTKI program or any other product candidates that we may develop;
- the extent to which we in-license or acquire rights to other products, product candidates or technologies; and

- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against any intellectual property-related claims.

Until such time, if ever, that we can generate product revenue sufficient to achieve profitability, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaboration agreements, other third-party funding, strategic alliances, licensing arrangements and marketing and distribution arrangements.

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 these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through other third-party funding, collaboration agreements, strategic alliances, licensing arrangements or marketing and distribution arrangements, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market products or product candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following is a summary of our significant contractual obligations as of December 31, 2016:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**More Than 1 Year and Less Than 3 Years**	**More Than 3 Years and Less Than 5 Years**	**More than 5 Years**
			(in thousands)		
Short- and long-term debt obligations(1)	$ 10,000	$ 556	$ 6,666	$ 2,778	$ —
Interest on short- and long-term debt obligations(2)	1,568	680	816	72	—
Operating lease obligations(3)	840	396	444	—	—
Minimum license payments(4)	124	43	81	—	—
Total	$ 12,532	$ 1,675	$ 8,007	$ 2,850	$ —

(1) Short- and long-term debt obligations relate to principal payments due on our 2014 Debt Facility.

(2) Interest payments due on our 2014 Debt Facility.

(3) Future minimum lease payments under our operating lease for our corporate headquarters and lab space in Waltham, Massachusetts that expires on January 31, 2019 with an average rent of approximately $34,000 per month.

(4) Consists of annual license payments associated with the JHU license agreement of $38,000 per year prior to achievement of the first commercial sale in the United States, European Union or Japan and annual license payments associated with MEEI of $5,000. As it relates to JHU, upon achievement of the first commercial sale in the United States, European Union or Japan, the minimum annual license payment will increase to approximately $113,000 per year.

This table does not include any other milestone or royalty payments which may become payable to third parties, as the amounts, timing and likelihood of such payments are not known with certainty.

We enter into contracts in the normal course of business with various third parties for preclinical research studies, clinical trials, manufacturing and other services. These contracts are cancellable by us typically upon prior notice of 60 days or less. Payments due upon cancellation generally consist only of payments for services provided and expenses incurred, including non-cancellable obligations of our service providers, up to the date of cancellation. These payments are not included in the table of contractual obligations above.

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 Securities and Exchange Commission.

Recently Issued Accounting Pronouncements

From time to time the Financial Accounting Standards Board, or FASB, or other standard-setting bodies, issue new accounting pronouncements. Where applicable, we adopt these new standards according to the specified effective dates. Unless otherwise disclosed in the notes to the financial statements appearing at the end of this prospectus, we believe that the impact of any recently issued standard(s) that are not yet effective will not have a material impact on our financial position or results of operation upon adoption.

Quantitative and Qualitative Disclosure About Market Risk

We did not hold any cash equivalents or investments as of December 31, 2016. As of December 31, 2016, our exposure to the risk of changes in market interest rates related primarily to our borrowings under our 2014 Debt Facility, which are subject to a variable interest rate. See "Liquidity and Capital Resources" above for a discussion of the interest rates applicable to our 2014 Debt Facility. We do not expect any material impact on our operating results from a reasonably possible change in market interest rates. A 50-basis point increase or decrease in interest rates would increase or decrease annual interest expense by $50,000 related to our borrowings under our 2014 Debt Facility.

BUSINESS

Overview

We are a biopharmaceutical company focused on the development and commercialization of therapeutics using our proprietary nanoparticle-based Mucus Penetrating Particles, or MPP, technology, with an initial focus on the treatment of eye diseases. Our MPPs are selectively-sized nanoparticles and have proprietary coatings. We believe that these two key attributes enable even distribution of drug particles on mucosal surfaces and significantly increase drug delivery to target tissues by enhancing mobility of drug particles through mucus and preventing drug particles from becoming trapped and eliminated by mucus. KPI-121, our lead program, consists of topically applied MPP nanosuspensions of loteprednol etabonate, or LE, a corticosteroid designed for ocular applications. Under our KPI-121 program, we have two product candidates in Phase 3 clinical development, one for the treatment of inflammation and pain following ocular surgery and one for the temporary relief of the signs and symptoms of dry eye disease.

We have completed a Phase 3 clinical trial of KPI-121 1.0%, our twice-a-day product candidate, in patients with inflammation and pain following cataract surgery, which is the most common type of ocular surgery in the United States. Commonly used topical ocular corticosteroid products for the treatment of post-operative inflammation and pain are approved for dosing four times a day. In June 2016, we initiated a second Phase 3 clinical trial of KPI-121 1.0%, and we have completed the enrollment phase with 520 patients enrolled. We expect to receive topline results of this clinical trial in the second quarter of 2017. Assuming positive results from this Phase 3 clinical trial, we anticipate filing a new drug application, or NDA, for the approval of KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery by the end of 2017. KPI-121 0.25% is our product candidate for patients with dry eye disease utilizing a two-week course of therapy. After achieving positive results in a Phase 2 clinical trial, we initiated two parallel Phase 3 clinical trials of KPI-121 0.25% in June 2016. Each of these Phase 3 clinical trials has a target enrollment of at least 900 dry eye patients and had enrolled over 500 dry eye patients as of March 15, 2017. We expect to receive topline results from these clinical trials by the end of 2017. Assuming positive results from these Phase 3 clinical trials, we anticipate filing an NDA for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018. We also are evaluating compounds in our topically applied MPP receptor Tyrosine Kinase Inhibitor program, or rTKI program, that inhibit the vascular endothelial growth factor, or VEGF, pathway, for the potential treatment of a number of retinal diseases.

For both KPI-121 product candidates, we plan to rely on the potentially more expeditious pathway to U.S. Food and Drug Administration, or the FDA, approval under Section 505(b)(2) of the U.S. Federal Food, Drug and Cosmetic Act, or the FDCA. Based on our discussions with European Union, or EU, regulatory authorities, if the results of our ongoing Phase 3 dry eye disease trials are positive, we believe that we will be able to utilize the results from these trials to support a submission of a Marketing Authorization Application, or MAA, for KPI-121 0.25% for the short-term treatment of dry eye disease in the EU through the Article 10(3) submission pathway.

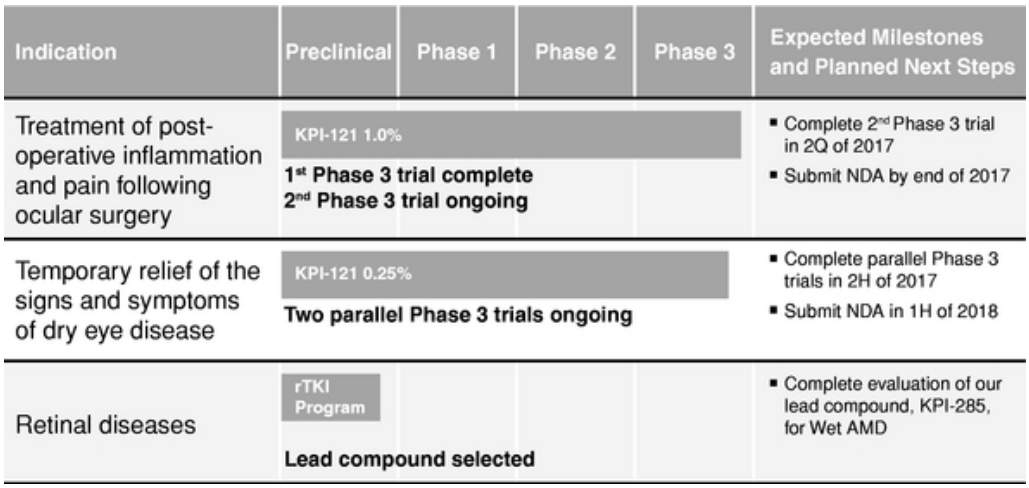
We have retained worldwide commercial rights for our current product candidates. If our current product candidates receive marketing approval, we expect to seek approval and commercialize them in the United States with our own focused, specialty sales force. We believe that this commercial organization will consist of approximately 150 sales and marketing personnel that will call on ophthalmologists and optometrists. In anticipation of the potential to commercialize KPI-121 for dry eye disease in the EU we are evaluating a variety of collaboration, distribution and other marketing arrangements with one or more third parties.

We own and/or exclusively license patents relating to our product candidates and MPP technology, including U.S. and foreign issued patents and pending patent applications covering KPI-121, our rTKI

program and our MPP technology, along with pending patent applications relating to ophthalmic applications of our MPP technology. The earliest expiration date of an issued U.S. patent covering our current product candidates is in 2033. The earliest expiration date of an issued U.S. patent relating to our MPP technology is in 2027.

Our Product Candidates

The following table describes the development stage of each of our current development programs:



KPI-121 1.0% for Post-Operative Inflammation and Pain

Ocular inflammation and pain are common complications following ocular surgery. According to Marketscope, a third-party provider of market data, in 2016 there were 3.9 million cataract surgeries, which represent the majority of the 7.7 million ocular surgeries in the United States. Other commonly performed ocular surgeries include strabismus, vitreoretinal, cornea and glaucoma procedures. Tissue damage caused by ocular surgery leads to the production of prostaglandins and an increase in blood flow to the affected area, which contribute to inflammation. The standard of care for post-operative inflammation and pain includes anti-inflammatory drugs such as corticosteroids, which improve patient comfort and accelerate recovery through disruption of the inflammatory cascade. The current four times a day dosing regimen for treatment can be burdensome for patients as they are taking multiple eye drop products following surgery, and is believed to reduce patient compliance. There are no ocular corticosteroid products currently approved in the United States for dosing two times a day for the treatment of post-operative inflammation and pain.

KPI-121 1.0%, our twice-a-day product candidate for the treatment of inflammation and pain following ocular surgery, is currently in Phase 3 clinical development. We believe that KPI-121 1.0% has a favorable profile for the treatment of inflammation and pain following ocular surgery, due to its twice-a-day dosing regimen, rapid onset of relief and favorable safety and tolerability profile. Based on a survey we commissioned of 73 ophthalmologists and optometrists, which we refer to as our clinician survey, we believe these features of KPI-121 1.0% will be attractive to prescribing clinicians. Surveyed clinicians indicated they would consider using KPI-121 1.0% to treat approximately 33% of their post-operative patients.

In our first successfully completed Phase 3 clinical trial of KPI-121 1.0% in patients who had undergone cataract surgery, administration of KPI-121 1.0% two times a day for 14 days achieved statistical significance for both primary efficacy endpoints of complete resolution of inflammation at day eight maintained through day 15 with no need for rescue medication (p=0.0024) and complete

resolution of pain at day eight maintained through day 15 with no need for rescue medication (p=0.0019). KPI-121 1.0% was well tolerated with no increases in intraocular pressure, or IOP, a common side effect of steroids, compared to placebo.

In June 2016, we initiated enrollment in a second Phase 3 clinical trial of KPI-121 1.0% in patients who have undergone cataract surgery and have completed the enrollment phase of the trial with 520 patients enrolled. We are comparing KPI-121 1.0% to placebo, both administered two times a day for 14 days in this trial. The key trial design elements of this second Phase 3 clinical trial are substantially similar to the first completed Phase 3 trial, including the same primary efficacy endpoints. If this trial is successful, we anticipate filing an NDA for KPI-121 1.0% by the end of 2017. Although our Phase 3 trials of KPI-121 1.0% are in patients who have undergone cataract surgery, we expect that these trials will support, and we intend to seek, an indication for post-operative inflammation and pain following ocular surgery.

KPI-121 0.25% for Dry Eye Disease

Dry eye disease is a chronic, episodic, multifactorial disease affecting the tears and ocular surface that can result in tear film instability, inflammation, discomfort, visual disturbance and ocular surface damage. Dry eye disease can have a significant impact on quality of life and can potentially cause long-term damage to the ocular surface. Due to the impact of dry eye disease on tear film dynamics, the condition can affect performance of common vision-related activities such as reading, using a computer and driving, and can lead to complications associated with visual impairment. In addition, the vast majority of dry eye patients experience acute exacerbations of their symptoms, which are commonly referred to as flares, at various times throughout the year. These flares can be triggered by numerous factors, including exposure to allergens, pollution, wind and low humidity, intense visual concentration such as watching television and working at a computer, contact lens wear, smoking and sleep deprivation, which cause ocular surface inflammation and impact tear production and/or tear film stability.

We estimate dry eye disease affects approximately 33 million people in the United States. Based on third-party academic research, we believe dry eye disease results in approximately $55 billion in direct and indirect costs in the United States each year, of which approximately $3.8 billion are direct medical costs. The exact prevalence of dry eye disease is unknown due to the difficulty in defining the disease and the lack of a single diagnostic test to confirm its presence. The Beaver Dam Offspring Study, a major epidemiological study published in 2014 in the *American Journal of Ophthalmology*, reported that in a cohort of over 3,000 patients, dry eye disease was self-reported by 14.5% of the patients. The prevalence of dry eye disease increases with age, and we expect that the number of dry eye disease cases will increase as the U.S. population continues to age. Epidemiology and market research commissioned by us indicate that there are an estimated 14.5 million patients with a diagnosis of dry eye disease in the United States. Additionally, based on a survey we commissioned of 30 patients diagnosed with dry eye disease, we estimate that approximately 90% of patients with dry eye disease experience flares, with the majority of patients experiencing multi-day symptoms and an average of approximately nine flares per year.

The most commonly used treatments for dry eye disease in the United States are over-the-counter eye drops, often referred to as "artificial tears," and two prescription pharmaceutical products, Restasis® and Xiidra®. Artificial tears are intended to supplement insufficient tear production or improve tear film instability, but do not treat the underlying inflammation in dry eye disease. Restasis increases tear production and Xiidra treats the signs and symptoms of dry eye disease, however, both Restasis and Xiidra are typically used chronically. Moreover, market research commissioned by us shows that patients continue to experience flares even while being treated with existing therapies.

We are developing KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease, utilizing a two-week course of therapy administered four times a day. If approved, KPI-121 0.25% could be the first product for this indication. We believe that KPI-121 0.25%'s broad mechanism of action, rapid onset of relief of both signs and symptoms, favorable safety and tolerability profile and potential to be complementary to existing therapies, will result in a favorable profile for the management of dry eye flares and other dry eye associated conditions that would benefit from temporary relief of dry eye signs and symptoms. Based on our clinician survey, we believe these features of KPI-121 0.25% will be attractive to prescribing clinicians. Surveyed clinicians indicated they would consider using KPI-121 0.25% to treat approximately 55% of their existing patients that suffer from flares.

In our Phase 2 clinical trial of 150 patients with dry eye disease, administration of KPI-121 0.25% four times a day for 4 weeks resulted in a statistically significant reduction in the primary sign endpoint of conjunctival hyperemia, or redness, at day 29 compared to placebo (p=0.0387). Significant reduction in conjunctival hyperemia was also observed at day 15, the first measurement point two weeks after initiation of dosing with KPI-121 0.25% (p=0.0090). There was also a meaningful reduction in the primary symptom endpoint of patient-reported ocular discomfort severity at days 15 and 29, although the improvements did not achieve statistical significance. We did not expect to achieve statistical significance for ocular discomfort in light of the small number of patients in this Phase 2 trial. KPI-121 0.25% was generally well tolerated, with no clinically significant treatment-related adverse events observed during the course of the trial.

Following discussions with key advisors and a meeting with the FDA in June 2015, we initiated in June 2016 two parallel Phase 3 clinical trials, each with a target enrollment of at least 900 dry eye patients, comparing KPI-121 0.25% to placebo, both administered four times a day for 14 days. We expect to receive topline results from both trials by the end of 2017. As of March 15, 2017, we had enrolled over 500 dry eye patients in each trial. The primary endpoints in these trials are conjunctival hyperemia, or redness, at day 15 and ocular discomfort severity at day 15. The trial design of the parallel Phase 3 trials is similar to our completed Phase 2 trial, other than the shortened length of dosing, the timing of the primary endpoint measurements and the increased number of patients. We believe that we will be able to demonstrate statistically significant reductions in our two primary endpoints in these Phase 3 trials. If these trials are successful, we anticipate filing an NDA for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018. We also are evaluating compounds in our rTKI program that inhibit the VEGF pathway for the potential treatment of a number of retinal diseases.

rTKI Program for Retinal Diseases

Commonly used therapies for retinal diseases must be injected directly into the patient's eye, often at monthly intervals. We believe that our MPP technology has the potential to facilitate the delivery of therapeutics into tissues in the back of the eye via topical dosing, which has the potential to provide a less invasive method of administration and a competitive advantage over therapies administered by intravitreal injection.

After synthesizing and testing a number of new chemical entities, or NCEs, from our topically applied rTKI program, we are further evaluating compounds for the potential topical treatment of a number of retinal diseases, including wet age-related macular degeneration, or Wet AMD, Diabetic Retinopathy, or DR, Diabetic Macular Edema, or DME, and Retinal Vein Occlusion, or RVO, each of which involves either the leakage of existing blood vessels or the proliferation of poorly formed and leaky blood vessels at the back of the eye. These eye diseases can significantly reduce vision and eventually lead to blindness. VEGF is a protein that plays a critical role in the formation of new blood vessels and increased permeability, two pathological processes that contribute to the vision loss associated with certain retinal diseases. In our rTKI program, we are initially targeting Wet AMD with

our lead rTKI compound, KPI-285. KPI-285 inhibits the VEGF pathway. In preclinical rabbit studies, topical administration of KPI-285 achieved concentrations in tissues in the back of the eye well above the concentrations required for *in vitro* inhibition of 50% of the VEGF receptor kinase activity. Prior to initiating IND-enabling studies, we may consider potential collaborative partnership opportunities to advance product candidates we develop through our rTKI program, including KPI-285.

Other Potential Applications of our MPP Technology

While our current focus is on the application of our MPP technology in ophthalmology, we have conducted preclinical studies demonstrating the potential of our MPP technology in other therapeutic areas. Mucus limits delivery of conventionally formulated drugs to the lung, cervical/vaginal tract, gastrointestinal tract and other mucus-protected tissues. In preclinical studies, we have demonstrated that our MPP technology can be used to increase the mucus penetration of over fifteen classes of drugs, including anti-infective and anti-inflammatory drugs.

Strategy

Our goal is to become a leading biopharmaceutical company focused on the development and commercialization of therapeutics using our proprietary MPP technology. Key elements of our strategy include:

- ***Successfully complete the clinical development of, and seek regulatory approval for, our KPI-121 product candidates.*** We are focused on completing our second Phase 3 clinical trial of KPI-121 1.0% administered two times a day for the treatment of inflammation and pain following cataract surgery and our two ongoing parallel Phase 3 clinical trials of KPI-121 0.25% administered four times a day in patients with dry eye disease. For KPI-121 1.0%, we expect to receive topline data from our second Phase 3 clinical trial in the second quarter of 2017 and, if successful, plan to file an NDA for the treatment of post-operative inflammation and pain following ocular surgery by the end of 2017. For KPI-121 0.25%, we expect to receive topline data from our ongoing Phase 3 clinical trials by the end of 2017 and, if successful, plan to file an NDA for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018.

- ***Maximize the commercial potential of KPI-121 1.0% for post-operative inflammation and pain.*** If our current Phase 3 clinical trial for KPI-121 1.0% in patients with inflammation and pain following cataract surgery is successful and we submit an NDA by the end of 2017, we expect the FDA could approve the NDA for KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery in the second half of 2018. Assuming we receive marketing approval for KPI-121 1.0% within this timeframe, we intend to commercialize KPI-121 1.0% in the United States by the end of 2019 with our own specialty sales force that will target ophthalmologists and optometrists.

- ***Maximize the commercial potential of KPI-121 0.25% for dry eye disease.*** If our ongoing parallel Phase 3 clinical trials for KPI-121 0.25% in patients with dry eye disease are successful and we submit an NDA in the first half of 2018, we expect the FDA could approve the NDA for KPI-121 0.25% for dry eye in late 2018 to early 2019. Assuming we receive marketing approval for KPI-121 0.25% within this timeframe, we intend to commercialize KPI-121 0.25% in the United States by the end of 2019 with our own specialty sales force that will target ophthalmologists and optometrists. If the results of our ongoing Phase 3 trials for patients with dry eye disease are positive, we also expect to submit an MAA for KPI-121 0.25% for the short-term treatment of dry eye disease. We also expect to explore commercialization of KPI-121 0.25% for the treatment of dry eye in certain markets outside the United States, including the

EU, utilizing a variety of collaboration, distribution and other marketing arrangements with one or more third parties.

- ***Advance early stage pipeline development programs, and further leverage our proprietary MPP technology.*** We are evaluating our current lead rTKI program compound, KPI-285, a topically applied MPP small molecule for the potential treatment of a number of retinal diseases. Prior to initiating IND-enabling studies, we may consider potential collaborative partnership opportunities to advance product candidates we develop through our rTKI program, including KPI-285. We also are evaluating additional product opportunities with significant unmet medical needs that we believe can be addressed by our proprietary MPP technology, including diseases of the lung, cervical/vaginal tract and gastrointestinal tract.

Our MPP Technology

Opportunities in Drug Delivery across Mucosal Barriers

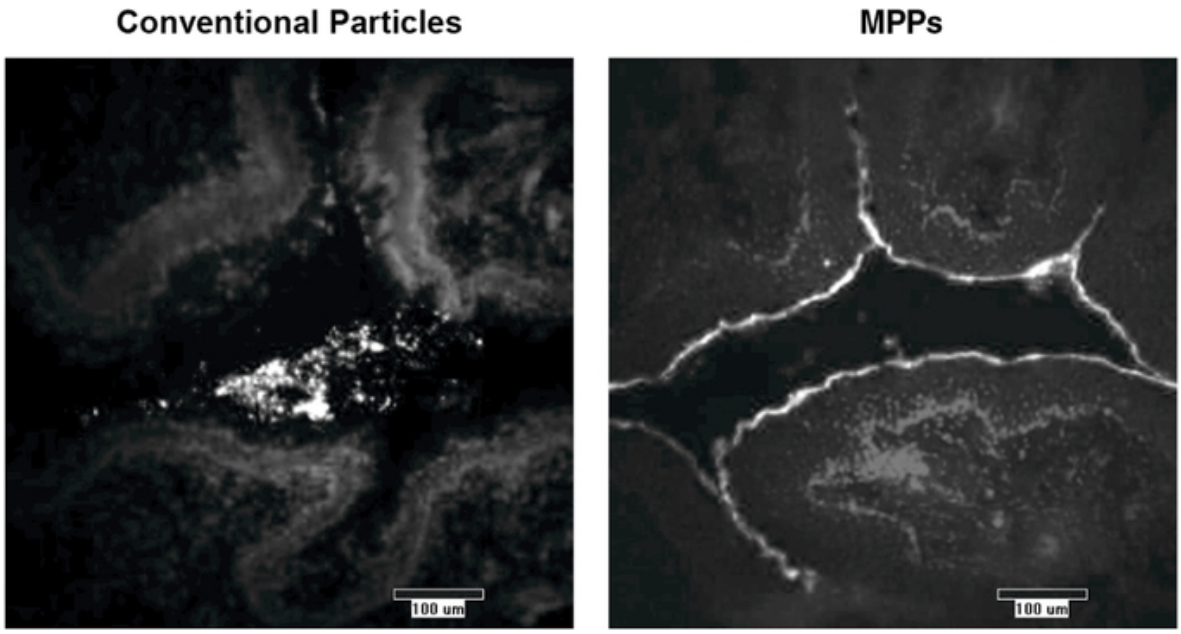
The body is surrounded by boundary tissues that play the important physiological role of preventing foreign bodies from penetrating into the body. The mucus that coats these tissues, the eyes, lung, cervical/vaginal tract and gastrointestinal tract, for example, serves as a protective barrier to trap and eliminate particulate matter, such as viruses, bacteria and allergens, before these agents can enter the underlying tissues and cause infections or elicit reactions. However, in playing this pivotal role of protection, mucus can also hinder medical treatments by limiting the penetration of medications to mucus-protected tissues, thereby reducing their therapeutic effect.

Mucus also makes it difficult to treat many ophthalmic diseases. The body can rapidly eliminate drugs delivered to the eye via the tear film protecting the surface of the eye, which can significantly limit the effectiveness of these drugs. This is the case both for drugs designed to treat conditions in the front of the eye, such as dry eye disease and post-operative inflammation and pain, as well as for drugs designed to treat conditions in the back of the eye, such as retinal diseases. We believe that our proprietary MPP technology has the potential to address this clear unmet medical need for more efficient delivery of drugs administered via topical ocular dosing.

MPP Technology

Our MPPs are selectively-sized nanoparticles, with average diameters of approximately 300 nanometers, and have non-covalent proprietary coatings. We believe that these two key attributes enable even distribution of drug particles on mucosal surfaces and significantly increase drug delivery to target tissues by enhancing mobility of drug particles through mucus and preventing drug particles from becoming trapped and eliminated by mucus.

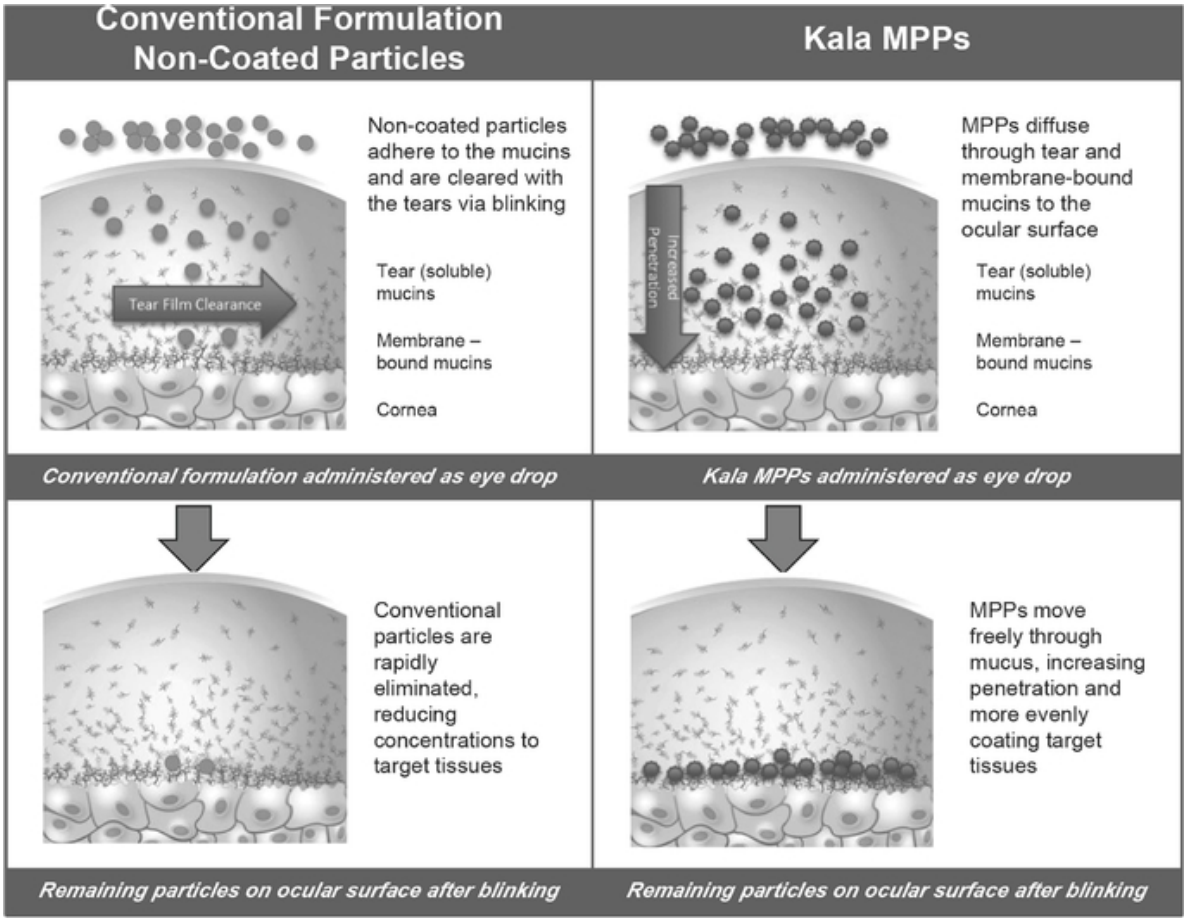
In a preclinical study, MPPs or conventional particles in a hypotonic solution were administered intravaginally to mice. Ten minutes after administration, the vaginal tissues were dissected and stained. The image on the left below shows the distribution of the conventional particles and the image on the right below shows the distribution of the MPPs. The conventional particles aggregated in the lumenal mucus and did not reach the target tissues. In contrast, the MPPs coated the entire vaginal epithelium, including all the target surfaces.



Source: Laura M. Ensign et al., Mucus-Penetrating Nanoparticles for Vaginal Drug Delivery Protect Against Herpes Simplex Virus, Science Translational Medicine, June 14, 2012.

While a significant portion of conventionally formulated ophthalmic drugs are rapidly eliminated via the tear film, we have shown that our MPPs are capable of achieving higher concentration on the surface of the eye, thereby enabling the active drug substance to reach cells in the underlying ocular tissue at higher levels.

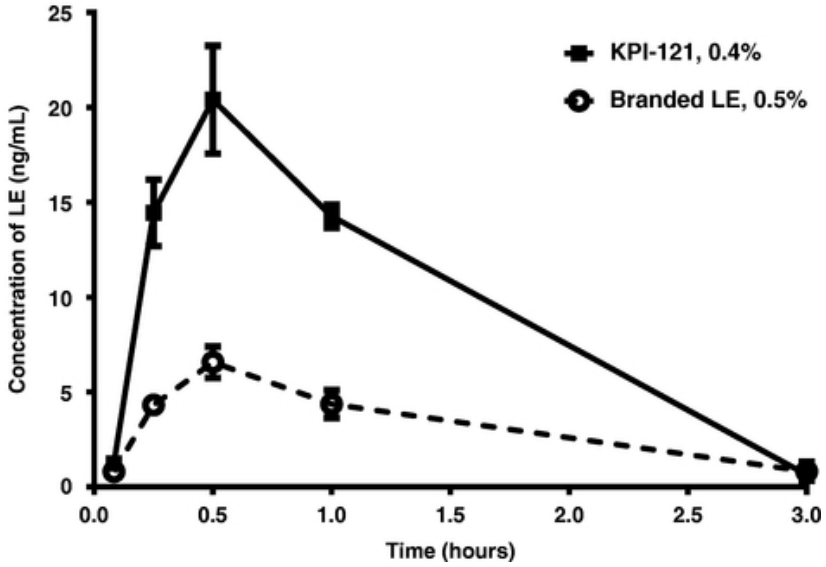
The graphic below illustrates the ability of our MPP drug nanoparticles to penetrate the tear and membrane-bound mucins to reach the ocular surface, as compared to conventional, non-coated particles, which adhere to the mucins in the tear film and are cleared with the tears through blinking.



This graphic is included for illustrative purposes only and is not intended to provide a complete representation of the way in which our MPP drug nanoparticles interact with the ocular surface.

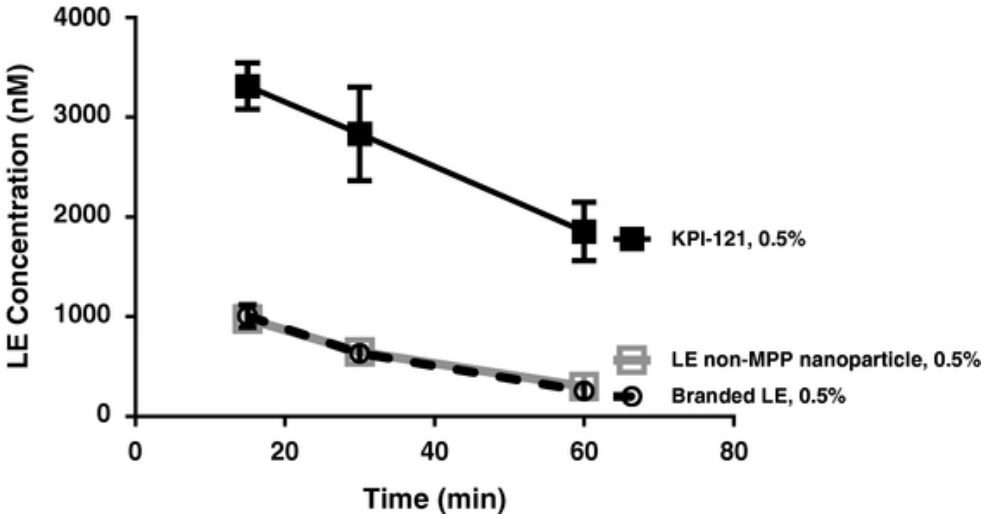
Our initial focus is to leverage our MPP technology to enhance delivery of drugs into the eye. In preclinical studies, KPI-121 demonstrated favorable pharmacokinetic characteristics and increased drug penetration into ocular tissues as compared to a branded form of LE. We administered either 0.4% KPI-121 or 0.5% branded LE to the eyes of two groups of rabbits. As illustrated in the line graph below, the concentrations of LE in aqueous humor, a transparent gelatinous fluid that fills the anterior and posterior chambers between the lens and the cornea, of the rabbit eyes treated with KPI-121 were more than three times higher than the rabbit eyes treated with branded LE 30 minutes after dosing.

LE in Aqueous Humor



We administered KPI-121 0.5%, branded LE 0.5%, or 0.5% of an LE non-MPP nanoparticle, to the eyes of three groups of rabbits and measured the amount of LE that was delivered to the cornea. The non-MPP nanoparticle was similar in size to our MPP nanoparticles but lacked the proprietary surface coating used in our MPP nanoparticles. As illustrated in the line graph below, concentrations of LE in the cornea of the rabbit eyes treated with KPI-121 were more than three times higher than the concentrations in rabbits treated with branded LE between 20 and 40 minutes after dosing. In addition, the rabbit eyes treated with the non-MPP nanoparticles had concentrations of LE similar to that in the rabbit eyes treated with branded LE and did not display the improved drug bioavailability properties observed with KPI-121. We believe these results highlight the importance of our proprietary MPP technology and show that KPI-121's improved pharmacokinetic profile has the potential to reduce the dosing strength and/or frequency of administration of LE with KPI-121 as compared to branded LE.

LE in Cornea



We also have demonstrated the potential of our MPP nanoparticles to increase the mucus penetration of over fifteen classes of drugs. While our current focus is in ophthalmology, in preclinical studies, our MPP technology has been effective in delivering drugs to the lungs, cervical/vaginal tract, gastrointestinal tract and other mucus-protected tissues. We have the ability to vary the rate of drug release as appropriate for the targeted disease state and tissue. As a result, drugs can be delivered either in rapid release formulations or as sustained release formulations that slowly release drug over a time period that ranges from hours to days.

Eye Disease

The human eye is often segmented into two sections—the front and back of the eye. The front of the eye consists of tissues and structures responsible for the protection and maintenance of the eye (including the cornea, conjunctiva and tear film), for providing nutrition to the various tissues of the eye (aqueous humor) and for facilitating the optimal transfer and focusing of light to the retina (including the cornea, iris and lens). Front-of-the-eye diseases include ocular inflammation, dry eye disease, infection, allergy and refractive disorders. Clinicians typically treat diseases that affect the front of the eye with topically applied eye drops. A major limitation of these treatments is that the eye rapidly eliminates topically applied medications via the tear film, limiting the penetration of drugs into the ocular tissue.

The back of the eye contains the retina, which is the light sensing layer of tissue, the choroid, which is a key vascular layer of the eye, the vitreous humor, which is a transparent gel that fills the vitreous chamber between the lens and the retina, and the optic nerve, which transmits visual information from the retina to the brain. Common retinal diseases include AMD, DR, DME and RVO. These diseases frequently result in damage to the vasculature of the eye, leading to poor function and/or leaking of existing vessels and often leading to proliferation of new, abnormal and leaky blood vessels in the back of the eye. These conditions can lead to retinal damage, scarring and irreversible loss of vision. The most common treatments for these diseases involve administration of biologic agents that block the VEGF pathway and prevent or retard the blood vessel leakage and/or proliferation. Unfortunately, clinicians must inject these biologic agents directly into the vitreous of the eye via frequent intravitreal injections, or IVTs, to maintain vision. Topical administration of therapeutics to treat retinal diseases has not yet been demonstrated to be effective in the management of retinal disease, most likely due to insufficient delivery of drug to the back of the eye.

Our Product Candidates

KPI-121

KPI-121, our lead program, consists of MPP nanosuspensions of LE designed to enhance penetration through the mucus layer of the tear film to enable LE to reach the underlying ocular tissue. We believe that our KPI-121 product candidates have a favorable profile for the treatment of front-of-the-eye inflammatory conditions due to their broad mechanism of action, rapid onset of relief and favorable safety and tolerability profile. LE is a corticosteroid developed specifically for the treatment of ophthalmic conditions and is designed to limit side effects, such as increases in IOP and cataract formation, that are associated with other ocular steroids. The first LE containing product was approved by the FDA in 1998.

All of our KPI-121 product candidates are eye drops that are topically administered as an aqueous suspension of LE. In preclinical studies, KPI-121 has demonstrated superior pharmacokinetic characteristics and bioavailability as compared to branded LE, with increased penetration of LE into ocular tissues. Our KPI-121 product candidates include:

- KPI-121 1.0%, administered two times a day, which we are developing for the treatment of post-operative inflammation and pain following ocular surgery; and

- KPI-121 0.25%, administered four times a day, which we are developing for the temporary relief of the signs and symptoms of dry eye disease.

We initially filed an IND for KPI-121 for the treatment of post-operative inflammation and pain following ocular surgery in December 2013, and subsequently amended the IND to also include the treatment of the signs and symptoms of dry eye disease in June 2014. We have completed a pivotal Phase 3 clinical trial of KPI-121 1.0% and a Phase 2 clinical trial of KPI-121 0.25%. Assuming we achieve positive results from our ongoing Phase 3 clinical trials, we anticipate that we will file an NDA for KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery by the end of 2017 and for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in the first half of 2018. We expect to file both of these NDA submissions under section 505(b)(2) of the FDCA. The section 505(b)(2) pathway provides an alternate and potentially more expeditious pathway to FDA approval for new or improved formulations, or new uses of previously approved products, by enabling an applicant to rely, in part, on the FDA's findings of safety and efficacy for an existing product, or published literature, in support of the NDA. An NDA filed under section 505(b)(2) would allow us to reference the extensive data already collected by the FDA on LE to supplement the safety and efficacy data generated in our clinical trials of KPI-121.

KPI-121 1.0% for Post-Operative Inflammation and Pain

Post-Operative Inflammation and Pain Overview

Ocular inflammation and pain are common complications following cataract surgery. According to Marketscope, in 2016 there were 3.9 million cataract surgeries, which represents the majority of the 7.7 million ocular surgeries in the United States. Other commonly performed ocular surgeries include strabismus, vitreoretinal, cornea and glaucoma procedures. Tissue damage caused by ocular surgery leads to the production of prostaglandins and increases in blood flow to the affected area, which contribute to inflammation. The standard of care for post-operative inflammation and pain includes anti-inflammatory drugs such as corticosteroids, which improve patient comfort and accelerate recovery through disruption of the inflammatory cascade. Commonly used topical ocular corticosteroid products for the treatment of post-operative inflammation and pain are approved for dosing four times a day. This dosing regimen can be burdensome for patients as they are taking multiple eye drops following surgery, and four-times-a-day dosing is believed to reduce patient compliance. There are no ocular corticosteroid products currently approved in the United States for dosing two times a day for the treatment of post-operative inflammation and pain.

Limitations of Existing Treatments for Post-Operative Inflammation and Pain

LE is a unique steroid that was designed to limit side effects, such as increases in IOP and cataract formation, that are associated with other ocular steroids. The first LE containing product, Lotemax®, was approved by the FDA in 1998. Subsequent gel and ointment formulations of Lotemax were approved by the FDA for the treatment of post-operative inflammation and pain following ocular surgery. Durezol® is a topical steroid approved by the FDA for the treatment of inflammation and pain associated with ocular surgery. Durezol eye drops are dosed four times a day for two weeks followed by dose tapering based on patient response.

The most commonly used ocular steroids, including Lotemax products and Durezol, are approved for the treatment of post-operative inflammation and pain with a four-times-a-day dosing regimen. This dosing regimen can be burdensome for patients as they are taking multiple eye drops following surgery, and four-times-a-day dosing may reduce patient compliance with the prescribed medication. There is currently no marketed ocular steroid product with an approved twice-a-day dosing regimen.

KPI-121 1.0% Opportunity in Post-Operative Inflammation and Pain

We believe that KPI-121 1.0% has a favorable profile for the treatment of inflammation and pain following ocular surgery, including the following attributes:

- *Twice daily dosing.* In our completed Phase 3 clinical trial, patients who had undergone cataract surgery and were treated with KPI-121 1.0% demonstrated a significant increase in the resolution of inflammation and pain after seven days of dosing using a twice daily dosing regimen as compared to patients treated with placebo. Given the generally accepted view that less frequent dosing leads to higher patient compliance, we believe the ability to achieve a significant reduction in inflammation and pain following surgery with a twice-a-day product will be a key differentiating attribute of KPI-121 1.0%.

- *Favorable safety and tolerability profile.* LE is one of the safest topical ocular steroids available due to its unique pharmacokinetics. LE was designed to be metabolized after exerting its anti-inflammatory action in the eye. The metabolism of LE to inactive metabolites reduces exposure of the trabecular meshwork to the active steroid, thus reducing risk of IOP increase relative to other steroids. To date, we have unmasked clinical data from over 400 patients treated with KPI-121 and have seen similar profiles with respect to mean IOP and the frequency of increases in IOP levels in patients treated with KPI-121 compared to patients treated with placebo. In our completed Phase 3 clinical trial, KPI-121 1.0% had a tolerability profile comparable to placebo.

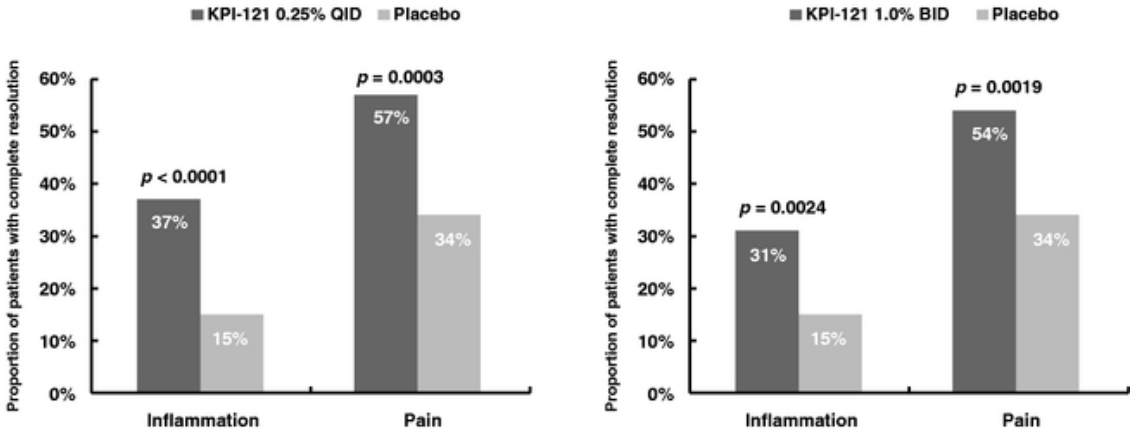
KPI-121 1.0% Phase 3 Clinical Development Program

In 2014, we conducted a Phase 3 multi-center, randomized, double-masked, placebo-controlled, parallel-group trial designed to evaluate two dosing regimens of KPI-121 ophthalmic suspension versus placebo in patients following cataract surgery. Patients who had a threshold degree of ocular inflammation on the day after surgery were randomized to receive either KPI-121 1.0% administered twice a day, or BID, KPI-121 0.25% administered four times a day, or QID, or placebos administered with the same frequency, in each case for two weeks. The primary endpoints for each of the KPI-121 treatment arms were:

- the proportion of patients with complete resolution (grade=0) of anterior chamber cells, which is an objective measure of intraocular inflammation, at post-operative day eight and maintained through the end of the trial with no need for rescue medication; and

- the proportion of patients with complete resolution of pain (grade=0) at post-operative day eight and maintained through the end of the trial with no need for rescue medication.

At day eight, statistical significance in the primary endpoint of complete resolution of inflammation with no need for rescue medications was achieved with both KPI-121 1.0% ($p=0.0024$) and KPI-121 0.25% ($p<0.0001$). Statistical significance in the primary endpoint of complete resolution of ocular pain by day eight with no need for rescue medications was also achieved for KPI-121 1.0% ($p=0.0019$) and KPI-121 0.25% ($p=0.0003$). The bar graph on the left below shows the number of patients in the KPI-121 0.25% and placebo treatment arms who had complete resolution of inflammation and complete resolution of pain at day eight of treatment, and the bar graph on the right below shows the number of patients in the KPI-121 1.0% and placebo treatment arms who had complete resolution of inflammation and complete resolution of pain at day eight of treatment.



Both KPI-121 1.0% and KPI-121 0.25% were well-tolerated in this trial. The table below shows the number of patients in the KPI-121 1.0%, KPI-121 0.25% and placebo treatment arms who experienced IOP increases of 5 mm Hg or greater as compared to baseline (measured prior to onset of treatment) on days four, eight, 15 and 18 of the trial. As shown below, only between 1% and 3% of patients treated with KPI-121 experienced increases in IOP of greater than 5 mm Hg, which was similar to the IOP increases observed in the placebo group.

Number of Patients with IOP Increase of Greater than 5 mm Hg in Study Eye

	KPI-121 0.25% QID	KPI-121 1.0% BID	Placebo
Day 4	0 (0.0%) n = 129	0 (0.0%) n = 125	2 (1.6%) n = 124
Day 8	1 (0.8%) n = 121	2 (1.7%) n = 117	0 (0.0%) n = 98
Day 15	2 (1.8%) n = 112	3 (2.7%) n = 110	1 (1.3%) n = 76
Day 18	1 (0.9%) n = 108	2 (1.9%) n = 106	1 (1.4%) n = 71

In June 2016, we initiated enrollment in a confirmatory Phase 3 clinical trial of KPI-121 1.0% for the treatment of inflammation and pain following cataract surgery and have completed the enrollment phase of the trial, with 520 patients enrolled. The Phase 3 clinical trial was designed to compare KPI-121 1.0% administered twice a day for 14 days to placebo.

This ongoing Phase 3 trial is a double-masked, randomized, controlled trial designed to evaluate the safety and efficacy of KPI-121 1.0% in subjects with inflammation and pain following cataract surgery. In this trial, patients who had a threshold degree of ocular inflammation on the day after surgery were randomized in an approximate 1:1 ratio to receive either KPI-121 1.0% ophthalmic suspension or placebo, in each case dosed twice a day for 14 days.

The primary endpoints in the trial are the same as those in the initial Phase 3 trial:

- the proportion of patients with complete resolution (grade=0) of inflammation as measured by anterior chamber cells at post-operative day eight and maintained through day 15 with no need for rescue medication; and

- the proportion of patients with complete resolution of pain (grade=0) at post-operative day eight and maintained through the day 15 with no need for rescue medication.

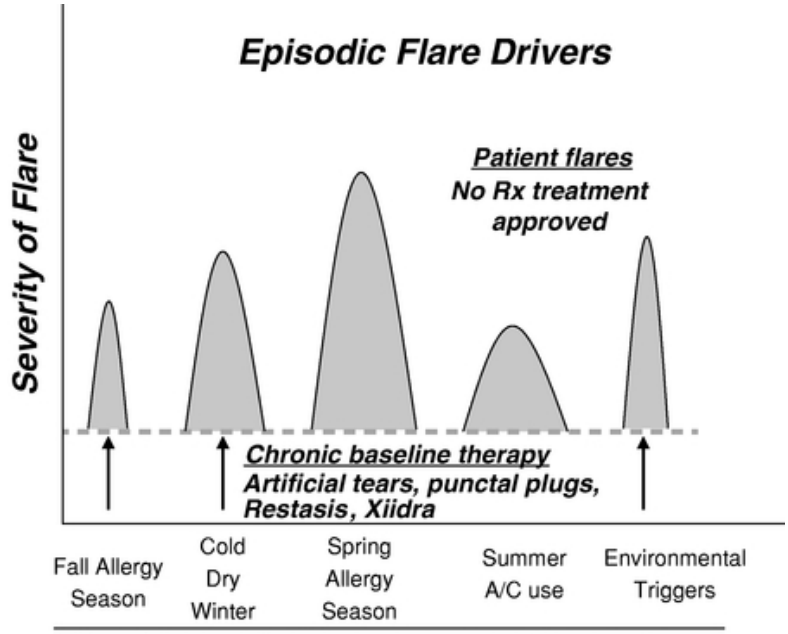
Based on our discussions with the FDA, we believe that once we complete the second Phase 3 trial, we will have generated sufficient safety information to support an NDA submission and that the only additional clinical trial required will be an ongoing pharmacokinetic trial in 20 healthy volunteers to evaluate plasma levels of LE and its key metabolites following topical dosing of KPI-121 1.0%. Assuming we achieve positive results from this second Phase 3 trial, we expect to submit an NDA by the end of 2017. Although we are conducting our Phase 3 trials of KPI-121 1.0% in patients who have undergone cataract surgery, we anticipate that these trials may support, and we intend to seek, an indication for the treatment of post-operative inflammation and pain following ocular surgery. In connection with our NDA submission, we intend to submit an application for pediatric exclusivity, which, if granted, could provide an additional six months of marketing exclusivity for KPI-121 1.0% once we complete a planned clinical trial in pediatric patients who have undergone cataract surgery. We also intend to seek "priority review" of our NDA submission.

KPI-121 0.25% for Dry Eye Disease

Dry Eye Disease Overview

Dry eye disease is a chronic, episodic, multifactorial disease affecting the tears and ocular surface that can result in tear film instability, inflammation, discomfort, visual disturbance and ocular surface damage. While the precise cause of dry eye disease is not fully understood, it often involves impairment of the lacrimal unit, which consists of the lacrimal glands, ocular surface and the sensory and motor nerves that connect them, and has a significant inflammatory component. There is significant published research that suggests that inflammation plays a major role in the development of dry eye disease. Dry eye disease can have a significant impact on quality of life and can potentially cause long-term damage to the ocular surface. Due to the impact of dry eye disease on tear film dynamics, the condition can affect performance of common vision-related activities such as reading, using a computer and driving, and can lead to complications associated with visual impairment. Dry eye disease is commonly treated by ophthalmologists and optometrists.

In addition to the disease's chronic nature, a significant number of patients experience acute exacerbations of their symptoms, which we refer to as flares, at various times throughout the year that can cause significant discomfort and disability. As illustrated in the graphic below, these flares can be triggered by numerous factors, such as environmental stimuli related to exposure to allergens, pollution, wind and low humidity. Intense visual concentration, such as watching television or working at a computer, can also trigger flares. Other potential triggers include contact lens wear, smoking and sleep deprivation, which cause ocular surface inflammation and impact tear production and/or tear film stability.



This graphic is included for illustrative purposes only and is not intended to provide an actual representation of the number or severity of flares, or the drivers thereof, either on an absolute basis or relative to one another.

We estimate dry eye disease affects approximately 33 million people in the United States. Based on third-party academic research, we believe dry eye disease results in approximately $55 billion in direct and indirect costs in the United States each year, of which approximately $3.8 billion are direct medical costs. The exact prevalence of dry eye disease is unknown due to the difficulty in defining the disease and the lack of a single diagnostic test to confirm its presence. The Beaver Dam Offspring Study, a major epidemiological study published in 2014 in the *American Journal of Ophthalmology*, reported that in a cohort of over 3,000 patients, dry eye disease was self-reported by 14.5% of the patients. The prevalence of dry eye disease increases with age, and we expect that the number of dry eye disease cases will increase as the U.S. population continues to age. Epidemiology and market research commissioned by us indicate that there are an estimated 14.5 million patients with a diagnosis of dry eye disease in the United States. Additionally, based on a survey we commissioned of 30 patients diagnosed with dry eye disease, we estimate that approximately 90% of patients with dry eye disease experience flares, with the majority of patients experiencing multi-day symptoms and an average of approximately nine flares per year.

The most commonly used treatments for dry eye disease in the United States are over-the-counter eye drops, often referred to as "artificial tears," and two prescription pharmaceutical products, Restasis and Xiidra. Artificial tears are intended to supplement insufficient tear production or improve tear film instability, but do not treat the underlying inflammation in dry eye disease. Restasis increases tear production and Xiidra treats the signs and symptoms of dry eye disease, however, both Restasis and Xiidra are typically used chronically. Moreover, market research commissioned by us shows that patients continue to experience flares even while being treated with existing therapies.

Limitations of Existing Treatments for Dry Eye Disease

Initial treatment for dry eye disease in the United States frequently consists of over-the-counter artificial tear/lubricating eye drops. Most over-the-counter artificial tears work by lubricating the eyes and helping to maintain moisture on the outer surface of the eye to provide temporary improvement in

patient comfort. These products do not treat the underlying inflammatory components of dry eye disease.

In addition to over-the-counter artificial tears, Restasis and Xiidra are sometimes prescribed as a chronic therapy for the treatment of dry eye disease. Restasis is a topically applied, ophthalmic formulation of the immuno-suppressant cyclosporine. Restasis is not approved for the treatment of the signs and symptoms of dry eye disease, but rather for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with dry eye disease. We believe that less than 10% of patients diagnosed with dry eye disease in the United States use Restasis. Restasis had sales in the United States of approximately $1.49 billion in 2016. Restasis, however, frequently causes burning upon instillation, and, according to the package insert, 17% of patients in clinical trials of Restasis reported ocular burning upon instillation. Xiidra is a topically applied ophthalmic formulation of lifitegrast, a small molecule LF1a antagonist, which was approved by the FDA in July 2016 for the treatment of the signs and symptoms of dry eye disease. Xiidra's partial launch year 2016 sales in the United States were $54.0 million.

Market research commissioned by us shows that patients continue to experience flares even while being treated with existing dry eye therapies, which we believe results in a significant unmet medical need for patients suffering from dry eye disease.

Topically applied steroids have been shown to provide some clinical benefit to patients with dry eye disease. However, no topical steroid products are approved in the United States for the treatment of dry eye disease, and there is no widely established treatment paradigm for the safe use of steroids in dry eye disease. As a result, off-label use of steroids in dry eye disease has been limited.

KPI-121 0.25% Opportunity in Dry Eye Disease

Based on our completed Phase 2 trial, we believe that KPI-121 0.25% has a favorable profile for the management of dry eye disease flares, including the following attributes:

- *Broad mechanism of action.* LE is a corticosteroid. Corticosteroids are known for their broad anti-inflammatory properties.

- *Rapid onset of relief.* In our Phase 2 clinical trial, patients treated with KPI-121 0.25% reported reductions in ocular discomfort within one to two days of initiation of treatment.

- *Favorable safety and tolerability profile.* LE is one of the safest topical ocular steroids available due to its unique pharmacokinetics. LE was designed to be metabolized after exerting its anti-inflammatory action in the eye. The metabolism of LE to inactive metabolites reduces exposure of the trabecular meshwork, an area of tissue located in the anterior chamber that is responsible for draining the aqueous humor from the eye, to active steroid, thus reducing the risk of an increase in IOP relative to other steroids. To date, we have unmasked data from over 400 patients treated with KPI-121 and have seen similar profiles with respect to mean IOP and the frequency of increases in IOP levels in patients treated with KPI-121 compared to patients treated with placebo. In our Phase 2 clinical trial of KPI-121 0.25% in dry eye disease, only 6.9% of patients treated with KPI-121 0.25% reported instillation site pain as compared to 3.8% for placebo.

- *Specifically targeting relief of episodic dry eye flares.* The mechanism of action and rapid onset of relief of KPI-121 0.25% in dry eye disease is distinct from that of artificial tears and chronic therapies like Restasis and Xiidra. Therefore, we expect it to be used as a stand-alone short course therapy to provide rapid relief of dry eye flares by improving ocular discomfort (a dry eye symptom) and reducing ocular redness (a dry eye sign).

- *Potentially complementary to existing therapies.* We believe that patients on chronic therapies can also experience dry eye flares and could potentially benefit from using KPI-121 0.25% in addition to their maintenance therapy.

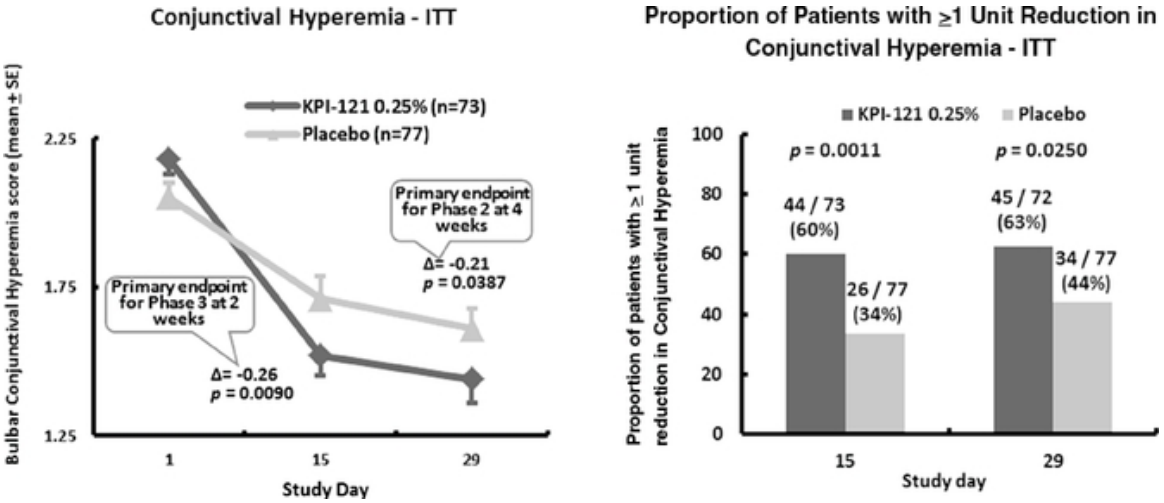
If we successfully complete our development program and receive FDA approval of our NDA for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease, we believe that we will have the first FDA-approved product for this indication with demonstrated safety and efficacy and an easy-to-follow two-week course dosing regimen. We believe that these attributes will make KPI-121 0.25% attractive to prescribing clinicians for treating patients that suffer from flares.

KPI-121 0.25% Phase 2 Clinical Trial Results

In 2014, we conducted a Phase 2 double-masked, randomized, controlled clinical trial of KPI-121 0.25% in 150 patients with dry eye disease at nine clinical sites. Patients were enrolled in the trial based on their magnitude of conjunctival hyperemia and ocular discomfort prior to treatment. Patients had a two week run-in with placebo administered four times a day and were required to maintain a similar magnitude of conjunctival hyperemia and ocular discomfort following this run-in period to be included in the randomization portion of the trial. Upon achieving the trial entry criteria after this run-in period, patients were randomized to receive either KPI-121 0.25% or a placebo four times a day for 28 days. Safety and efficacy assessments were made over the four week dosing period.

For our Phase 2 clinical trial, the primary sign endpoint was conjunctival hyperemia at day 29, as measured via a 0 to 4 scale ranging from no hyperemia (score=0) to severe hyperemia (score=4), and the primary symptom endpoint was ocular discomfort severity, as reported by the patient on a visual analog scale ranging from 0 to 100 mm (0 mm=very mild; 100 mm=very severe).

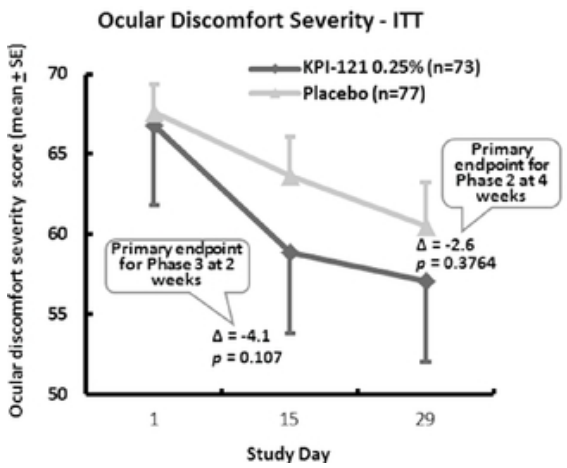
KPI-121 0.25% achieved statistical significance for the primary clinical sign endpoint of conjunctival hyperemia at day 29 with a treatment difference between KPI-121 0.25% and placebo of 0.21 units (p=0.0387). The line graph on the left below plots the mean conjunctival hyperemia score for patients in the KPI-121 0.25% treatment arm and the placebo treatment arm, in each case as measured on days one, 15 and 29 of the trial. As illustrated below, the treatment difference at day 15 between KPI-121 0.25% and placebo was 0.26 units (p=0.0090). In addition, a significantly higher proportion of patients treated with KPI-121 0.25% demonstrated a reduction of one unit or greater in conjunctival hyperemia as compared to patients treated with placebo. The bar graph on the right below shows the number and percentage of patients in each of the KPI-121 0.25% and placebo treatment arms who demonstrated a reduction of one unit or greater in conjunctival hyperemia scores at days 15 and 29 of the trial.

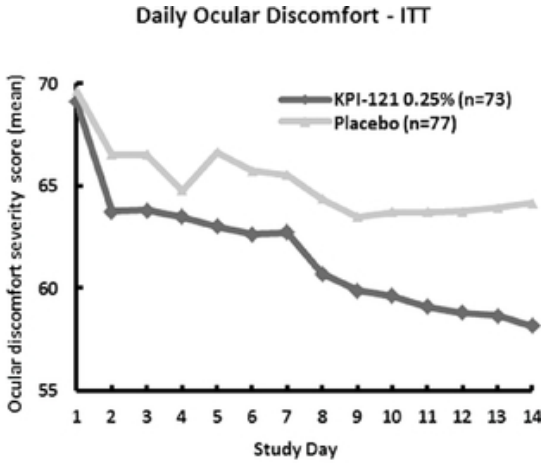


In the trial, patients treated with KPI-121 0.25% also showed reductions in the symptom endpoint of ocular discomfort severity. While KPI-121 0.25% did not achieve statistical significance for this endpoint, the treatment difference between KPI-121 0.25% and placebo for reduction of ocular discomfort was 4.1 mm at day 15 (p=0.1072) and 2.6 mm at day 29 (p=0.3674). We did not expect to achieve statistical significance for ocular discomfort in light of the small number of patients in the trial (73 patients were treated with KPI-121 0.25% and 77 patients were treated with placebo). We believe we will be able to demonstrate statistical significance for ocular discomfort severity in our upcoming Phase 3 trials, which will include much larger numbers of patients.

The line graph on the left below plots the mean ocular discomfort severity score for patients in the KPI-121 0.25% and placebo treatment arms, in each case measured as the mean of the seven days prior to days one, 15 and 29 of the trial. We conducted post-hoc analyses of the data using the three-and five-day ocular discomfort mean data for purposes of designing our Phase 3 clinical trials. Utilizing the three-day mean data for the statistical analysis yielded a treatment difference at day 15 of 5.01 mm (p=0.062). Although post-hoc analyses performed after unmasking trial results can result in the introduction of bias and may not be predictive of success in our Phase 3 clinical trials, we believe that these retrospective analyses provide additional information regarding our Phase 2 clinical trial. Based on our discussions with the FDA, we are using three-day ocular discomfort means for the statistical analysis of our primary efficacy endpoints in our ongoing Phase 3 clinical trials.

The line graph on the right below plots the mean daily ocular discomfort score for patients in the KPI-121 0.25% and placebo treatment arms for the first 14 days of the trial, showing rapid reduction in the severity of ocular discomfort for patients dosed with KPI-121.





KPI-121 0.25% was generally well tolerated, with no significant treatment-related safety findings observed during the course of the trial. The only treatment-emergent adverse event reported in greater than 3% of patients was instillation site pain, which was reported in 6.9% of patients treated with KPI-121 0.25% compared to 3.8% of patients treated with placebo. Patients in the KPI-121 0.25% and placebo treatment arms had a similar profile with respect to mean IOP, and the number of patients with an IOP increase of greater than 5 mm Hg was similar in the two treatment groups. The table below shows the mean IOP measurements for patients in the KPI-121 0.25% administered four times a day, or QID, and placebo treatment arms, in each case as measured on days one, 15 and 29 of the trial.

Mean IOP (mm Hg) in Study Eye

	KPI-121 0.25% QID Mean (SD)	Placebo Mean (SD)
Day 1	14.61 (2.88)	15.00 (2.48)
Day 15	15.34 (2.66)	15.32 (2.73)
Day 29	15.57 (3.12)	15.08 (2.80)

The table below shows the number of patients in the KPI-121 0.25% and placebo treatment arms who experienced an IOP increase of 5 mm Hg or greater from baseline (as measured at the onset of treatment) on days 15 and 29 of the trial. One patient in each of the KPI-121 0.25% and placebo treatment arms had elevated IOP classified as adverse events.

Number of Patients with IOP Increase of Greater than 5 mm Hg in Study Eye

	KPI-121 0.25% QID	Placebo
Day 15	4 / 71 (5.6%)	4 / 78 (5.1%)
Day 29	3 / 72 (4.2%)	2 / 78 (2.6%)

KPI-121 0.25% Phase 3 Clinical Development Program

In June 2016, we initiated two parallel Phase 3 clinical trials, each with approximately 900 dry eye patients, comparing KPI-121 0.25% to placebo, both administered four times a day for 14 days. Both

ongoing Phase 3 trials have the same patient inclusion/exclusion criteria as the Phase 2 trial and the same primary endpoints of conjunctival hyperemia and ocular discomfort severity, but in the Phase 3 trials these primary endpoints will be measured at day 15 compared to day 29 in the Phase 2 trial. We believe that measuring our primary endpoint at day 15 in the ongoing Phase 3 trials is advantageous because the statistical results of the Phase 2 trial were more robust at day 15 than at day 29. We believe ophthalmologists and optometrists are familiar with two-week dosing regimens from their use of other steroids for post-operative inflammation and pain, and we discussed with the FDA the use of a two-week dosing regimen for KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease in our June 2015 meeting. Except for the number of patients (approximately 900 in each of the Phase 3 trials versus 150 in the Phase 2 trial), the timing of the primary endpoint measurements (day 15 in the ongoing Phase 3 trials versus day 29 in the Phase 2 trial) and the duration of dosing (14 days in the Phase 3 trials versus 28 days in the completed Phase 2 trial), the key elements of the Phase 3 trial design are substantially similar to the Phase 2 trial design.

The two ongoing Phase 3, multi-center, double-masked, randomized, vehicle-controlled, parallel-group trials are designed to evaluate the safety and efficacy of KPI-121 0.25% ophthalmic suspension versus placebo in patients with dry eye disease. Patients are being enrolled in each trial based on their magnitude of conjunctival hyperemia and ocular discomfort prior to treatment. Patients have a two week run-in with placebo administered four times a day and are required to maintain a similar magnitude of conjunctival hyperemia and ocular discomfort following this run-in period to be included in the randomization portion of the trials. Upon achieving the trial entry criteria after this run-in period, patients are being randomized to either KPI-121 or placebo study arms in an approximate 1:1 ratio. Patients are receiving 1-2 drops in each eye four times a day for approximately 14 days. Key inclusion criteria include a diagnosis of dry eye in both eyes, a conjunctival hyperemia score of 2 or greater and a patient-reported ocular discomfort severity score of at least 50 mm at visit 1 (prior to the two week run-in period) and 40 mm at visit 2 (following the two week run-in period) using a visual analog scale. Patients are being evaluated at the beginning of the trial and evaluated at day eight and day 15.

The primary sign endpoint for each trial is mean change from baseline bulbar conjunctival hyperemia at day 15 as compared to day one in the region of highest severity of bulbar conjunctival hyperemia in the study eye as determined by photographic assessment using a masked photographic reading center. The primary symptom endpoint for each trial is mean change from baseline ocular discomfort severity as determined by the scores recorded in the patient's diary for the three days prior to day 15 compared to the three days prior to day one.

We expect, based on our current development plan, that the FDA will require us to demonstrate effectiveness on both of our primary endpoints in our two Phase 3 clinical trials for market approval of an indication for the temporary relief of the signs and symptoms of dry eye disease. Based on our discussions with the FDA, we believe that following completion of the two Phase 3 trials, we will have generated sufficient safety information to support an NDA submission and that the only additional clinical trial required will be a currently ongoing pharmacokinetic trial in 20 healthy volunteers to evaluate plasma levels of LE and its key metabolites following topical dosing of KPI-121 0.25% that is expected to be completed the first half of 2017. Assuming we achieve positive results from this trial, we expect to submit an NDA by the end of 2017. We also intend to seek "priority review" of our NDA submission.

Based on our discussions with EU regulatory authorities, if the results of our ongoing Phase 3 trials are positive, we believe that we will be able to utilize the results from these U.S. dry eye disease trials to support a submission of an MAA for KPI-121 0.25% for the short-term treatment of dry eye disease in the EU through the Article 10(3) submission pathway. We also are currently evaluating the scope of additional manufacturing and stability data we may need to acquire to support our MAA submission. In anticipation of the potential to seek approval and commercialize KPI-121 for dry eye

disease in the EU we are evaluating a variety of collaboration, distribution and other marketing arrangements with one or more third parties.

rTKI Program

Retinal Disease

There are a range of retinal diseases and conditions that adversely affect vision.

Age-Related Macular Degeneration (AMD)

AMD is a degeneration of the macula of the retina that leads to impairment and loss of central vision. There are two categories of AMD: "Dry" AMD, which involves slow deterioration of the retina with submacular drusen, atrophy, loss of macular function and central vision impairment; and "Wet" AMD, which involves growth of abnormal blood vessels under the retina and macula, resulting in edema, tissue damage and rapid loss of central vision. If untreated, neovascularization in Wet AMD patients typically results in significant vision loss and the formation of a scar under the macular region of the retina. Most cases begin as Dry AMD, which can progress to Wet AMD. Wet AMD is a leading cause of blindness in people over the age of 55 in the United States and the European Union. The incidence of Wet AMD increases substantially with age, and we expect that the number of cases of Wet AMD will increase with growth of the elderly population in the United States.

The current standard of care for Wet AMD is intravitreal injection of drugs that target VEGF, one of the key proteins involved in neovascularization.

Diabetic Retinopathy (DR) and Diabetic Macular Edema (DME)

DR is an ocular complication of diabetes involving changes of retinal blood vessels that lead to significant visual impairment. These changes include dysfunction of retinal vasculature (nonproliferative retinopathy), with vascular occlusion and increased permeability, leading to retinal hypoxia and DME. The disease can further progress to proliferative retinopathy with retinal neovascularization, hemorrhage and retinal detachment.

Among an estimated 19.8 million adults in the United States aged forty years and older known to have diabetes, the prevalence rate for DME is 3.8%, or approximately 746,000 people. DME is the leading cause of visual impairment and blindness in Americans between 20 and 74 years old.

Retinal Vein Occlusion (RVO)

RVO is a blockage of the small veins that carry blood away from the retina. The disease can cause sudden blurring or vision loss in all or part of one eye. RVO has been estimated to affect 16 million people worldwide.

Limitations of Existing Treatments for Retinal Disease

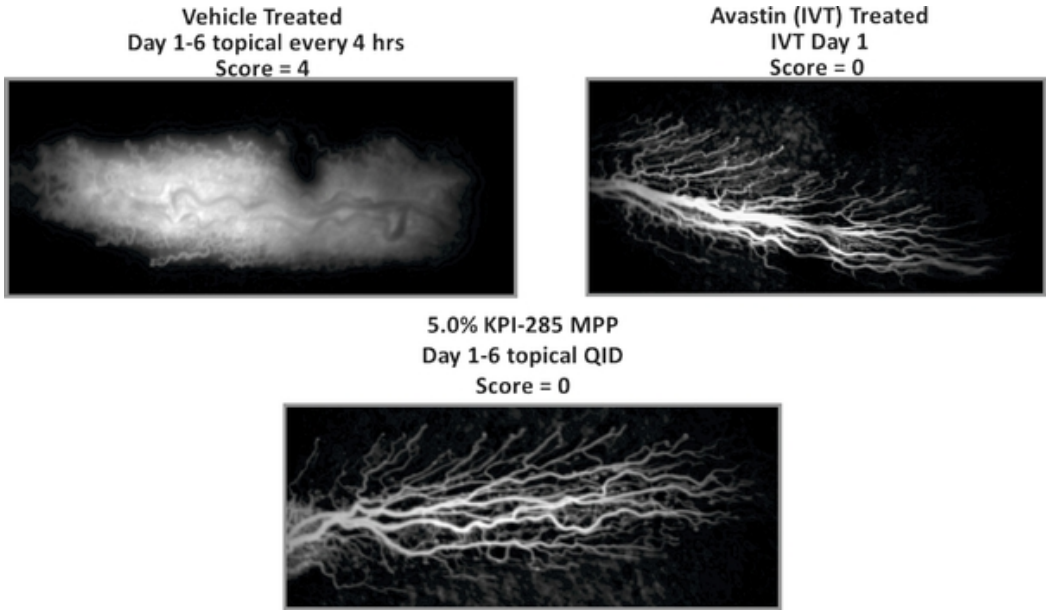
VEGF is a protein that plays a critical role in the formation of new blood vessels and increased permeability, two pathological processes that contribute to the vision loss associated with certain retinal diseases. Several VEGF tyrosine kinase inhibitors have been investigated in AMD patients in clinical trials. These inhibitors have been administered in a variety of ways, including intravitreal injection, oral administration and topical dosing. To date, no VEGF tyrosine kinase inhibitors have been approved in the United States for the treatment of ocular diseases. We believe that there is a substantial market opportunity for a safe and effective topically applied VEGF tyrosine kinase inhibitors to treat various retinal diseases, such as AMD, DR, DME, RVO and related neovascular diseases.

The most common treatments for retinal diseases involve administration of biologic agents that block the VEGF pathway and prevent or retard the blood vessel leakage and/or proliferation. Unfortunately, clinicians must inject these biologic agents directly into the eye via frequent IVTs to maintain vision. Sales of the two leading IVT biologic agents used to treat eye diseases associated with abnormal blood vessel proliferation, Genentech's Lucentis® and Regeneron's Eylea®, were $1.4 billion and $3.3 billion, respectively, in the in the United States in 2016. Topical administration of therapeutics to treat retinal diseases has not yet been demonstrated to be effective in the management of retinal disease, most likely due to insufficient delivery of drug to the back of the eye.

rTKI Program for the Potential Treatment of Wet AMD, DR, DME and RVO

Through our rTKI program we generate small molecule new chemical entities, or NCEs, that are designed to be potent VEGF receptor kinase inhibitors. KPI-285, our current rTKI lead compound, is engineered with our MPP technology to facilitate its penetration into tissues in the back of the eye following topical dosing. In preclinical rabbit studies, KPI-285 demonstrated a potency of less than one nanomolar against the VEGF receptor-2 kinase and good selectivity against particular growth factor receptor kinases, cell cycle kinases and other detrimental receptors. KPI-285 is designed to be administered topically as an eye drop.

In preclinical rabbit studies, topical administration of KPI-285 achieved concentrations in tissues in the back of the eye well above the concentrations required for *in vitro* inhibition of 50% of the VEGF receptor kinase activity. In addition, in a rabbit model of VEGF induced vascular leakage, topically applied KPI-285 MPP reduced leakage to an extent similar to that achieved with an IVT injection of Genentech's Avastin®, a recombinant human monoclonal antibody that binds to VEGF. In this model, vascular leakage of fluorescein was induced by IVT injections of VEGF. The extent of fluorescein leakage observed in various treatment groups was scored in a blinded fashion on a scale from 0 to 4, with 0 being no leakage and 4 being heavy leakage. As shown in the photographs below, the magnitude of the effect achieved with topical administration of KPI-285 5.0% was similar to that observed with IVT injection of Avastin.



We believe that an effective topical therapy for patients with retinal diseases such as AMD, DR, DME and RVO will be a significant advancement in the treatment of these diseases and could increase

patient compliance and reduce treatment burden in patients suffering from these sight threatening diseases. Prior to initiating IND-enabling studies, we may consider potential collaborative partnership opportunities to advance our product candidates we develop through our rTKI program, including KPI-285.

Potential Applications in Other Diseases

Mucus limits delivery of conventionally formulated drugs to mucosal tissues such as the lung, cervical/vaginal and gastrointestinal tract. While our current focus is in ophthalmology, our MPP technology has been effective in preclinical studies in enhancing drug delivery to these other tissues. We also have demonstrated in preclinical studies that MPP technology can be used to increase mucus penetration of over fifteen classes of drugs.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technologies, knowledge, experience and scientific resources provide us with competitive advantages, we face competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. 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 include large pharmaceutical and biotechnology companies, and specialty pharmaceutical and generic drug companies. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of KPI-121 0.25%, KPI-121 1.0% and other product candidates, if approved, are likely to be the product candidate's efficacy, safety, method of administration, convenience, price, the level of generic competition and the availability of insurance coverage and reimbursement from government and other third-party payors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. In addition, our ability to compete may be affected because in many cases insurers or other third-party payors seek to encourage the use of generic products.

Competition in Inflammation and Pain Following Ocular Surgery

Following ocular surgery, topical steroids are commonly prescribed to manage and prevent complications from post-operative inflammation.

Currently marketed topical steroids are the main competition to KPI-121 for the treatment of inflammation and pain following ocular surgery. The current market leaders in the United States based on revenue are Lotemax products and Durezol. Generic topical steroid formulations consist mainly of

products containing prednisolone, fluorometholone or dexamethasone. In addition, there are various formulations of steroids that are produced by compounding pharmacies and are injected into the eye following ocular surgery.

There are a number of product candidates in preclinical research and clinical development by third parties in the United States for the treatment of inflammation and pain following ocular surgery, including the following: Valeant Pharmaceuticals International, Inc. is developing an LE gel, which is formulated for topical delivery and is currently in Phase 3 clinical development; Ocular Therapeutix is developing Dextenza™, a punctal plug that is currently in Phase 3 clinical development and has filed an NDA for the treatment of ocular pain following ophthalmic surgery; and Icon Bioscience, Inc. is developing IBI-10090, which is formulated as a drug delivery system, or DDS, to be injected into the eye following ocular surgery and is currently in Phase 3 clinical development.

There also are other product candidates for treatment of pain and inflammation following ocular surgery in the United States that are in earlier stage development.

Competition in Dry Eye Disease

The current disease management approaches for dry eye disease in the United States include the following: over-the-counter artificial tear eye drops, which are used on an intermittent or chronic basis to provide short term symptomatic relief of dryness and irritation; off-label prescription drugs, including topical steroid drops and/or other similar products, which are prescribed on occasion for treatment of dry eye disease; on-label prescription drugs, including Restasis and Xiidra, which are the only prescription pharmaceutical products that are approved in the United States for use in patients with dry eye disease. Restasis is approved for increasing tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation and Xiidra is approved for treatment of the signs and symptoms of dry eye disease. Both are typically used chronically as part of the dry eye management regimen, which also includes artificial tears and other palliative therapies, such as hot compresses for the eye and lid hygiene management, and devices, such as punctal plugs that are inserted into the tear ducts to inhibit tear drainage, resulting in more moisture on the surface of the eye.

We are developing KPI-121 0.25% for the temporary relief of the signs and symptoms of dry eye disease, which may include the management of dry eye disease flares. Any product that is developed for the temporary treatment of the signs and symptoms of dry eye disease could directly compete with KPI-121 0.25%.

There are several product candidates in preclinical research and clinical development by third parties in the United States for the treatment of dry eye disease. If any of these product candidates is approved and such product candidate either treats the signs and symptoms of dry eye disease or reduces the frequency of flares in dry eye patients, it could reduce the overall market opportunity for KPI-121 0.25%.

Based on publicly available information, we have identified, among others, various product candidates in clinical development for the chronic treatment of dry eye disease in the United States. Mimetogen has a small molecule topical TrkA agonist formulation, MIM-D3, which is currently in Phase 3 clinical development. Sun Pharmaceuticals has a topical cyclosporine formulation, Seciera™, that has completed a Phase 3 trial. ReGenTree has a topical thymosin Beta 4 formulation, TGN-259, that is currently in Phase 3 trials. Allergan has a topical dry eye program, AGN-195263, in Phase 3 trials for evaporative dry eye. There also are other product candidates for the treatment of dry eye disease in the United States in earlier stage development. Further, Oculeve, which was acquired by Allergan, is developing True Tear a nasal neurostimulation medical device that is intended to increase tear production. We are not aware of any product candidate in Phase 3 clinical development in the United States for the short term treatment of dry eye disease.

Competition in Retinal Disease

Several therapies have been developed to block the effects of VEGF by binding to and sequestering the protein. These include Regeneron Pharmaceuticals, Inc.'s Eylea, and Genentech, Inc.'s Lucentis and Avastin. Avastin is approved as an anti-cancer agent, but is widely used off-label in ophthalmic diseases. All of these therapies are administered by intravitreal injections and must be regularly dosed for optimal efficacy.

In addition to IVTs, there also are two marketed DDS that are used to treat retinal diseases: Ozurdex®, which releases dexamethasone, a corticosteroid, and is marketed by Allergan, and Iluvien®, which releases fluocinolone acetonide and is marketed by Alimera Sciences.

There are a number of preclinical research and clinical development programs being conducted by third parties to develop treatments for retinal diseases, including programs utilizing topically applied small molecules. We expect that product candidates currently in clinical development, or that could enter clinical development in the near future, may represent significant competition if approved. These product candidates may provide efficacy, safety, convenience and other benefits that are not provided by currently marketed therapies.

Sales and Marketing

In light of our stage of development, we have not yet established a commercial organization or distribution capabilities. We have retained worldwide commercial rights for our product candidates. If our product candidates receive marketing approval, we plan to commercialize them in the United States with our own focused, specialty sales force. We believe that this commercial organization will consist of approximately 150 sales and marketing personnel that will call on ophthalmologists and optometrists. We would expect to conduct most of the buildout of this organization following NDA approval of any of our product candidates. We expect to explore commercialization of KPI-121 0.25% and potentially other product candidates in certain markets outside the United States, including the EU, utilizing a variety of collaboration, distribution and other marketing arrangements with one or more third parties.

Manufacturing

We utilize our substantial in-house expertise and know-how to develop and scale up our manufacturing processes before these processes are transferred to third-party contract manufacturers, and to understand and establish controls of critical process parameters. We also have personnel with deep product development experience who actively manage the third-party contract manufacturers producing KPI-121 and other products that we may develop in the future.

Our KPI-121 drug product is currently manufactured at qualified contract manufacturing facilities in compliance with current good manufacturing practice, or cGMP, regulations. We expect that the same facilities will be used to manufacture commercial lots of both dosage strengths of KPI-121. Preparation of the concentrated milled suspension is performed by a third party using a manufacturing process developed by us. The milled suspension is sterilized by gamma radiation at a separate third-party facility. The sterilized milled suspension is then diluted to the final drug product concentrations and filled into multi-dose ophthalmic dropper bottles at a third-party manufacturer.

We have supply agreements in place with these contract manufacturers to support KPI-121 clinical and registration manufacturing, release testing, registration stability, and clinical labeling and packaging. We also have entered into long term commercial supply agreements with these contract manufacturers to supply KPI-121 in the event that we are granted marketing approval in the United States.

We obtain the active pharmaceutical ingredient from a third-party manufacturer. We currently obtain our supplies from this manufacturer and also have entered into a long term commercial supply agreement with this manufacturer.

Intellectual Property

Our success depends significantly on our ability to obtain and maintain proprietary protection for our product candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. We seek to protect our proprietary position by, among other methods, filing U.S. and certain foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business, where patent protection is available. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

As of February 28, 2017, we owned or co-owned ten U.S. issued patents and 19 U.S. patent applications, as well as two foreign issued patents and 86 foreign patent applications (including Patent Cooperation Treaty, or PCT, applications). We exclusively licensed a total of six U.S. issued patents and 12 U.S. patent applications, as well as 12 foreign issued patents and 46 foreign patent applications including original filings, continuations and divisional applications. Our patent portfolio includes the following patents and patent applications that we own or exclusively license:

- three U.S. issued composition-of-matter patents, co-owned with JHU, covering KPI-121, which are expected to expire in 2033, and related patent applications filed in the United States, Australia, Canada, the European Patent Office, Japan, Hong Kong and South Korea, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2033;

- an owned U.S. composition-of-matter patent application, covering KPI-121 1.0% and KPI-121 0.25%, and ten related patent applications filed in Australia, Canada, China, the European Patent Office, Hong Kong, India, Japan, Mexico, and New Zealand, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2033;

- fifteen owned patent applications filed in the United States, Australia, Brazil, Canada, Chile, China, the European Patent Office, Hong Kong, Japan, South Korea, Mexico, New Zealand, and Thailand relating to ophthalmic applications of our MPP technology, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2033;

- five owned U.S. issued composition-of-matter patents covering rTKI compounds, including KPI-285, and 55 pending patent applications filed in the United States, Australia, Canada, China, the European Patent Office, Hong Kong, India, Japan, Korea, Mexico, and New Zealand, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2034;

- two U.S. issued patents, exclusively sub-licensed from GrayBug Vision, Inc., covering methods for treating an eye disease or disorder by injecting or instilling a drug delivery system, which are expected to expire in 2031, a related granted Canadian patent, and related patent applications filed in the United States, and the European Patent Office, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2031; and

- a composition-of-matter U.S. issued patent, exclusively in-licensed from JHU, related to our MPP technology, which is expected to expire in 2028, and two related patent applications filed in

the United States and the European Patent Office, which, if granted, and if the appropriate maintenance, renewal, annuity or other governmental fees are paid, are expected to expire in 2025.

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 claimed filing date of a non-provisional patent application in the applicable country. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office 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 Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension 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 patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent applicable to each regulatory review period may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. We cannot provide any assurance that any patent term extension with respect to any U.S. patent will be obtained and, if obtained, the duration of such extension.

Similar provisions are available in the European Union and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our product candidates receive approval by the FDA or foreign regulatory authorities, we expect to apply for patent term extensions on issued patents covering those products, depending upon the length of the clinical trials for each drug and other factors. The expiration dates referred to above are without regard to potential patent term extension or other market exclusivity that may be available to us. However, we cannot provide any assurances that any such patent term extension of a foreign patent will be obtained and, if obtained, the duration of such extension.

Trade Secrets

In addition to patents, we may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets can be difficult to protect. We seek to protect our proprietary technology and processes, and obtain and maintain ownership of certain technologies, in part, by confidentiality and invention assignment agreements with our employees, consultants, scientific advisors and contractors. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

License Agreements

The Johns Hopkins University

In November 2009, we entered into an exclusive license agreement with The Johns Hopkins University, or JHU, which was amended in November 2012, May 2014, and August 2014 and amended in part by the JHU settlement agreement described below. We refer to the amended license agreement with JHU as the JHU license agreement. Pursuant to the JHU license agreement, JHU granted us an exclusive, worldwide, sublicenseable license under specified patent rights covering various aspects of MPP technology, including JHU's interest in patent rights that we jointly own with JHU, to research, develop, make, use and sell products and provide services in any field. JHU also granted us a non-exclusive license to use specified know-how with limits on JHU's right to license the know-how to other commercial entities.

Financial Terms

In connection with the JHU license agreement, we paid JHU an upfront license fee in the low tens of thousands of dollars and issued to JHU a low single digits percentage of our common stock. We also reimbursed JHU for the prosecution and maintenance costs incurred by JHU for the licensed patent rights prior to our entering into the JHU license agreement, and we are responsible for all or, in specified cases, a portion of the ongoing costs relating to the prosecution and maintenance of the JHU patent rights licensed to us. We paid JHU fees in the low tens of thousands of dollars upon entering into certain of the amendments to the JHU license agreement. We also have paid JHU an aggregate of approximately $261,000 in minimum annual royalty fees and development milestones and are obligated to pay fees upon achievement of additional specified development milestones and achievement of specified commercial milestones under the license agreement.

In connection with the JHU license agreement and the JHU settlement agreement described below, we are obligated to make certain future payments to JHU. Beginning in the fourth quarter of 2017, we are obligated to pay JHU future annual minimum royalties that will not exceed approximately $113,000 per year. In addition, we must pay JHU a tiered royalty rate in the low single-digits on annual sales by us or our affiliates of products or services covered by a valid issued claim, or certain pending claims, of a licensed JHU patent right in the country of sale, from which we may, under specified circumstances, offset portions of amounts we must pay as royalties on other patent rights in order to commercialize a licensed product or licensed service up to a maximum reduction of a mid-double digit percentage. We must also pay a percentage, in the high single digits, of certain consideration we or our affiliates receive from sublicensing rights under the licensed JHU intellectual property, subject to specified offsets and deductions. We may offset against each minimum annual payment the royalties and sublicense income that we pay to JHU in the preceding twelve month period. We also are obligated to pay to JHU certain milestone payments, which will not exceed approximately $1.9 million in the aggregate, if certain development and commercial events are achieved. The JHU patent rights sublicensed to us by GrayBug under the JHU settlement agreement described below are considered in the same way as the JHU patent rights directly licensed to us by JHU for purposes of determining these payments.

Diligence Obligations

We are required to use commercially reasonable efforts to develop and introduce the licensed products and licensed services to the market, including developing licensed products suitable for different indications, consistent with sound and reasonable business practice and judgment, and, after introducing a licensed product or licensed service into the market, we must endeavor to keep licensed products and licensed services reasonably available to the public consistent with sound and reasonable business practice and judgment.

Term and Termination

The JHU license agreement will expire on a country-by-country basis upon the expiration of the last to expire licensed patent in such country or, if no licensed patent issues in such country, then in November 2029. Either we or JHU may terminate the JHU license agreement for the other party's breach that is not cured within specified time periods or if the other party is subject to certain bankruptcy protections. In addition, we may terminate the JHU license agreement, for any reason, upon 90 days' prior written notice to JHU.

GrayBug, LLC and The Johns Hopkins University

A dispute arose between us, JHU, and GrayBug, Inc. (formerly known as GrayBug, LLC and Graybug, Inc.), or GrayBug, over rights licensed to us and GrayBug under certain patent rights owned

by JHU. In October 2014, we, GrayBug, and JHU resolved this matter by entering into a Settlement and License Agreement, which was amended in January 2015, which we refer to as the JHU settlement agreement.

Under the JHU settlement agreement, GrayBug granted us, under specified patent rights that are exclusively licensed to GrayBug by JHU in all fields, an exclusive, worldwide royalty-free sublicense in the field of use of a particle with specified characteristics for delivery of a biologically active material through mucus, mucin, or a mucosal barrier where such delivery does not involve administration via injection to the eye, which we refer to as the Kala sublicense field. In turn, we granted GrayBug, under specified patent rights that are exclusively licensed to us by JHU in all fields, including JHU's rights in certain patent rights that we jointly own with JHU, an exclusive, worldwide royalty-free sublicense in the field of use of a particle with specified characteristics for delivery of a biologically active material to the eye via injection, excluding any particle comprising or consisting of loteprednol etabonate, which we refer to as the Graybug sublicense field. In addition, JHU granted us, under the terms of the JHU license agreement, an exclusive, sublicenseable, worldwide license under certain additional specified patent rights relating to further aspects of MPP technology in the Kala sublicense field. JHU also granted to GrayBug a similar license under these same patent rights in the GrayBug sublicense field. In January 2017, GrayBug terminated its license under all but one patent family in these patent rights. As a result, for those patent rights terminated by Graybug, we are now licensed in both the Kala sublicense field and the GrayBug sublicense field. JHU also granted us certain rights to obtain a non-exclusive license to certain additional patent rights and, if we obtain such a license, we would have the exclusive right to negotiate for a specified time period an exclusive license under such patent rights in the Kala sublicense field. Under the JHU settlement agreement, we agreed not to exercise our rights under the JHU patent rights licensed or sublicensed to us, including the patent rights that we jointly own with JHU, to use a particular active ingredient. Each party to the JHU settlement agreement may sublicense the rights granted to it pursuant to the JHU settlement agreement, subject to notice requirements and the requirement that any such sublicense must involve some aspect of collaboration, joint research, development, manufacture, partnership or the like. In any event, sublicenses beyond a specified number of tiers are not permitted without the original licensing party's written consent.

We, GrayBug and JHU each released the others, and certain persons affiliated with them, from any claims and losses known to the releasing party as of the effective date of the JHU settlement agreement in connection with the dispute that led to the JHU settlement agreement.

Financial Terms

The JHU settlement agreement also amended certain of our financial obligations under the JHU license agreement, which we have reflected in the description above. Neither we nor GrayBug owe the other any royalties, milestone payments or other payments with respect to the sublicenses and other rights granted to each other. In addition, JHU agreed that we are not responsible for paying to JHU any sublicense fees or other payments due under our JHU license agreement that may otherwise have arisen as a result of our granting GrayBug the sublicenses under the JHU settlement agreement.

For the specified patent rights directly licensed to us by JHU in the Kala sublicense field under the JHU settlement agreement, we reimbursed JHU for a portion of the patent prosecution and maintenance costs incurred prior to entering the JHU settlement agreement, and we are responsible for a portion of ongoing costs relating to the prosecution and maintenance of the JHU patent rights directly licensed to us by JHU under the JHU settlement agreement, except that we are responsible for all of the ongoing prosecution and maintenance costs of any of these JHU patent rights for which there is no other direct licensee of JHU, such as the JHU patent rights licensed to us in both the Kala sublicense field and the GrayBug sublicense field.

Term and Termination

The JHU settlement agreement will expire upon the expiration of all the patent rights that are the subject of the JHU settlement agreement. We may terminate one or more of the licenses or sublicenses granted to us in the JHU settlement agreement on a country-by-country basis for convenience upon 30 days' prior written notice to GrayBug. We or GrayBug may terminate one or more the sublicenses granted to the other party under the JHU patent rights if the other party, or its employees, officers, directors, agents or representatives, takes certain steps to oppose, attempt to invalidate or prevent the issuance of any of the patent rights directly licensed to the terminating party by JHU.

Government Regulation and Product Approvals

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the United States

In the United States, the FDA regulates drug products under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources The failure to comply with applicable requirements under the FDCA and other applicable laws at any time during the product development process, approval process or after approval may subject an applicant and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the Department of Justice or other governmental entities.

An applicant seeking approval to market and distribute a new drug product in the United States must typically undertake the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must take effect before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of an NDA;
- review of the product by an FDA advisory committee, where appropriate or if applicable;

- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;

- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;

- payment of user fees and securing FDA approval of the NDA; and

- compliance with any post-approval requirements, including Risk Evaluation and Mitigation Strategies, or REMS, and post-approval studies required by the FDA.

Preclinical Studies

Preclinical studies include laboratory evaluation of the purity and stability of the manufactured drug substance or active pharmaceutical ingredient and the formulated drug or drug product, as well as *in vitro* and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

Companies usually must complete some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, and must also develop additional information about the chemistry and physical characteristics of the investigational 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 candidate product 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 candidate product does not undergo unacceptable deterioration over its shelf life.

The IND and IRB Processes

An IND is an exemption from the FDCA that allows an unapproved drug to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer an investigational drug to humans. Such authorization must be secured prior to interstate shipment and administration of any new drug that is not the subject of an approved NDA. In support of a request for an IND, applicants must submit a protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. The FDA requires a 30-day waiting period after the filing of each IND before clinical trials may begin. This waiting period is designed to allow the FDA to review the IND to determine whether human research subjects will be exposed to unreasonable health risks. At any time during this 30-day period, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold. In this case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can begin.

Following commencement of a clinical trial under an IND, the FDA may also place a clinical hold or partial clinical hold on that trial. A clinical hold is an order issued by the FDA to the sponsor to

delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. For example, a specific protocol or part of a protocol is not allowed to proceed, while other protocols may do so. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, an investigation may only resume after the FDA has notified the sponsor that the investigation may proceed. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the investigation can proceed.

A sponsor may choose, but is not required, to conduct a foreign clinical study under an IND. When a foreign clinical study is conducted under an IND, all FDA IND requirements must be met unless waived. When the foreign clinical study is not conducted under an IND, the sponsor must ensure that the study complies with FDA certain regulatory requirements in order to use the study as support for an IND or application for marketing approval. Specifically, on April 28, 2008, the FDA amended its regulations governing the acceptance of foreign clinical studies not conducted under an investigational new drug application as support for an IND or a new drug application. The final rule provides that such studies must be conducted in accordance with good clinical practice, or GCP, including review and approval by an independent ethics committee, or IEC, and informed consent from subjects. The GCP requirements in the final rule encompass both ethical and data integrity standards for clinical studies. The FDA's regulations are intended to help ensure the protection of human subjects enrolled in non-IND foreign clinical studies, as well as the quality and integrity of the resulting data. They further help ensure that non-IND foreign studies are conducted in a manner comparable to that required for IND studies.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct a continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access that only the group maintains to available data from the study. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the participants or patients are being exposed to an unacceptable health risk. Other reasons for suspension or termination may be made by us based on evolving business objectives and/or competitive climate.

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

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.

- *Phase 2.* The drug is administered to 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.

- *Phase 3.* The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the drug; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Concurrent with clinical trials, companies often complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as 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 drug candidate and, among other things, must develop methods for testing the identity, strength, quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

Submission of an NDA to the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is subject to an application user fee, which for federal fiscal year 2017 is $2,038,100 for an application requiring clinical data. The sponsor of an approved NDA is also subject to annual product and establishment user fees, which for fiscal year 2017 are $97,750 per product and $512,200 per establishment. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for drugs with orphan designation and a waiver for certain small businesses, an exception from the establishment fee when the establishment does not

engage in manufacturing the drug during a particular fiscal year, and an exception from the product fee for a drug that is the same as another drug approved under an abbreviated pathway.

The FDA conducts a preliminary review of an NDA within 60 days of its receipt and informs the sponsor by the 74th day after the FDA's receipt of the submission to determine whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also 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 has agreed to certain performance goals in the review process of NDAs. Most such applications are meant to be reviewed within ten months from the date of filing, and most applications for "priority review" products are meant to be reviewed within six months of filing. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA submission, including drug component manufacturing (such as active pharmaceutical ingredients), finished drug product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease, expected benefit of the product, expected duration of treatment, seriousness of known or potential adverse events, and whether the product is a new molecular entity. REMS can include medication guides, physician communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU may include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The FDA may require a REMS before approval or post-approval if it becomes aware of a serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product.

The FDA may refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Fast Track, Breakthrough Therapy, Priority Review and Regenerative Advanced Therapy Designations

The FDA is authorized to designate certain products for expedited review if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs are referred to as fast track designation, breakthrough therapy designation, priority review designation and regenerative advanced therapy designation.

Specifically, the FDA may designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or

life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's time period goal for reviewing a Fast Track application does not begin until the last section of the application is submitted. In addition, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Second, a product may be designated as a Breakthrough Therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to Breakthrough Therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to design the clinical trials in an efficient manner.

Third, the FDA may designate a product for priority review if it is a product that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case- by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months.

Finally, with passage of the 21st Century Cures Act, or Cures Act, in December 2016, Congress authorized the FDA to accelerate review and approval of products designated as regenerative advanced therapies. A product is eligible for this designation if it is a regenerative medicine therapy (as defined in the Cures Act) that is intended to treat, modify, reverse or cure a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such disease or condition. The benefits of a regenerative advanced therapy designation include early interactions with FDA to expedite development and review, benefits available to breakthrough therapies, potential eligibility for priority review and accelerated approval based on surrogate or intermediate endpoints.

Accelerated Approval Pathway

The FDA may grant accelerated approval to a drug for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the drug has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a condition when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. Drugs granted

accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a drug.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a drug, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. Thus, accelerated approval has been used extensively in the development and approval of drugs for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. As a result, a drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

The FDA's Decision on an NDA

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many 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.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences 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.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. 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.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards 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, or with manufacturing processes, or failure to comply with regulatory requirements, may result in 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;
- fines, 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 pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug 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.

Section 505(b)(2) NDAs

NDAs for most new drug products are based on two full clinical studies which must contain substantial evidence of the safety and efficacy of the proposed new product. These applications are submitted under Section 505(b)(1) of the FDCA. The FDA is, however, authorized to approve an alternative type of NDA under Section 505(b)(2) of the FDCA. This type of application allows the applicant to rely, in part, on the FDA's previous findings of safety and efficacy for a similar product, or published literature. Specifically, Section 505(b)(2) applies to NDAs for a drug for which the investigations made to show whether or not the drug is safe for use and effective in use and relied upon by the applicant for approval of the application "were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted."

Thus, Section 505(b)(2) authorizes the FDA to approve an NDA based on safety and effectiveness data that were not developed by the applicant. NDAs filed under Section 505(b)(2) may provide an alternate and potentially more expeditious pathway to FDA approval for new or improved formulations or new uses of previously approved products. If the Section 505(b)(2) applicant can establish that reliance on the FDA's previous approval is scientifically appropriate, the applicant may eliminate the need to conduct certain preclinical or clinical studies of the new 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 drug 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 Section 505(b)(2) applicant.

Abbreviated New Drug Applications for Generic Drugs

In 1984, with passage of the Hatch-Waxman Amendments to the FDCA, Congress authorized the FDA to approve generic drugs that are the same as drugs previously approved by the FDA under the NDA provisions of the statute. To obtain approval of a generic drug, an applicant must submit an abbreviated new drug application, or ANDA, to the agency. In support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the reference-listed drug, or RLD.

Specifically, in order for an ANDA to be approved, the FDA must find that the generic version is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form, and the strength of the drug. At the same time, the FDA must also determine that the generic drug is "bioequivalent" to the innovator drug. Under the statute, a generic drug is bioequivalent to a RLD if "the rate and extent of absorption of the drug do not show a significant difference from the rate and extent of absorption of the listed drug..."

Upon approval of an ANDA, the FDA indicates whether the generic product is "therapeutically equivalent" to the RLD in its publication Approved Drug Products with Therapeutic Equivalence Evaluations, also referred to as the Orange Book. Clinicians and pharmacists consider a therapeutic equivalent generic drug to be fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA's designation of therapeutic equivalence often results in substitution of the generic drug without the knowledge or consent of either the prescribing clinicians or patient.

Under the Hatch-Waxman Amendments, the FDA may not approve an ANDA until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity. For the purposes of this provision, a new chemical entity, or NCE, is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity

has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity if the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication. Three-year exclusivity would be available for a drug product that contains a previously approved active moiety, provided the statutory requirement for a new clinical investigation is satisfied. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting ANDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product. The FDA typically makes decisions about awards of data exclusivity shortly before a product is approved.

Hatch-Waxman Patent Certification and the 30-Month Stay

Upon approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Each of the patents listed by the NDA sponsor is published in the Orange Book. When an ANDA applicant files its application with the FDA, the applicant is required to certify to the FDA concerning any patents listed for the reference product in the Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would.

Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable or will not be infringed by the new product.

A certification that the new product will not infringe the already approved product's listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired (other than method of use patents involving indications for which the ANDA applicant is not seeking approval).

If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days after the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months after the receipt of the Paragraph IV notice, expiration of the patent, or a decision in the infringement case that is favorable to the ANDA applicant.

To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the

approved product in the Orange Book to the same extent that an ANDA applicant would. As a result, approval of a Section 505(b)(2) NDA 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 Section 505(b)(2) applicant.

Pediatric Studies and Exclusivity

Under the Pediatric Research Equity Act of 2003, an NDA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the drug product 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. With enactment of the Food and Drug Administration Safety and Innovation Act or FDASIA, in 2012, sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and other information required by regulation. The applicant, the FDA, and the FDA's internal review committee must then review the information submitted, consult with each other, and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Additional requirements and procedures relating to deferral requests and requests for extension of deferrals are contained in FDASIA. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application. We intend to submit an application for pediatric exclusivity for KPI-121 1.0% for the treatment of post-operative inflammation and pain following ocular surgery, however, we cannot provide any assurance that pediatric exclusivity will be obtained for KPI-121 1.0% or any other product candidates.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may designate a drug product as an "orphan drug" if it is intended to treat a rare disease or condition (generally meaning that it affects fewer than 200,000 individuals in the United States, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug product available in the United States for treatment of the disease or condition will be recovered from sales of the product). A company must request orphan product designation before submitting an NDA. If the request is granted, the FDA will disclose the

identity of the therapeutic agent and its potential use. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product with orphan status receives the first FDA approval for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product generally will be receiving orphan product exclusivity. Orphan product exclusivity means that the FDA may not approve any other applications for the same product for the same indication for seven years, except in certain limited circumstances. Competitors may receive approval of different products for the indication for which the orphan product has exclusivity and may obtain approval for the same product but for a different indication. If a drug or drug product designated as an orphan product ultimately receives marketing approval for an indication broader than what was designated in its orphan product application, it may not be entitled to exclusivity.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch-Waxman Act, which permits a patent restoration of up to five years for patent term lost during product development and the FDA regulatory review. The restoration period granted is typically 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 ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved drug product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple drugs for which approval is sought can only be extended in connection with one of the approvals. The U.S. Patent and Trademark Office reviews and approves the application for any patent term extension or restoration in consultation with the FDA. We cannot provide any assurance that any patent term extension with respect to any U.S. patent will be obtained and, if obtained, the duration of such extension, in connection with any of our product candidates.

The 21st Century Cures Act

On December 13, 2016, President Obama signed the Cures Act into law. The Cures Act is designed to modernize and personalize healthcare, spur innovation and research, and streamline the discovery and development of new therapies through increased federal funding of particular programs. It authorizes increased funding for the FDA to spend on innovation projects. The new law also amends the Public Health Service Act to reauthorize and expand funding for the NIH. The Act establishes the NIH Innovation Fund to pay for the cost of development and implementation of a strategic plan, early stage investigators and research. It also charges NIH with leading and coordinating expanded pediatric research. Further, the Cures Act directs the Centers for Disease Control and Prevention to expand surveillance of neurological diseases.

With amendments to the FDCA and the Public Health Service Act, or PHSA, Title III of the Cures Act seeks to accelerate the discovery, development, and delivery of new medicines and medical technologies. To that end, and among other provisions, the Cures Act reauthorizes the existing priority review voucher program for certain drugs intended to treat rare pediatric diseases until 2020; creates a new priority review voucher program for drug applications determined to be material national security threat medical countermeasure applications; revises the FDCA to streamline review of combination product applications; requires FDA to evaluate the potential use of "real world evidence" to help support approval of new indications for approved drugs; provides a new "limited population" approval pathway for antibiotic and antifungal drugs intended to treat serious or life-threatening infections; and authorizes FDA to designate a drug as a "regenerative advanced therapy," thereby making it eligible for certain expedited review and approval designations.

Review and Approval of Drug Products in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of products. Whether or not it obtains FDA approval for a product, the company would need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. The approval process ultimately 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.

Procedures Governing Approval of Drug Products in the European Union

Pursuant to the European Clinical Trials Directive, a system for the approval of clinical trials in the European Union has been implemented through national legislation of the member states. Under this system, an applicant must obtain approval from the competent national authority of a European Union member state in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial after a competent ethics committee has issued a favorable opinion. Clinical trial application must be accompanied by an investigational medicinal product dossier with supporting information prescribed by the European Clinical Trials Directive and corresponding national laws of the member states and further detailed in applicable guidance documents.

To obtain marketing approval of a product under European Union regulatory systems, an applicant must submit a marketing authorization application, or MAA, either under a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid for all European Union member states. The centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy products and products with a new active substance indicated for the treatment of certain diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional.

Under the centralized procedure, the Committee for Medicinal Products for Human Use, or the CHMP, established at the European Medicines Agency, or EMA, is responsible for conducting the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. In this circumstance, the EMA ensures that the opinion of the CHMP is given within 150 days.

The decentralized procedure is available to applicants who wish to market a product in various European Union member states where such product has not received marketing approval in any European Union member states before. The decentralized procedure provides for approval by one or more other, or concerned, member states of an assessment of an application performed by one member

state designated by the applicant, known as the reference member state. Under this procedure, an applicant submits an application based on identical dossiers and related materials, including a draft summary of product characteristics, and draft labeling and package leaflet, to the reference member state and concerned member states. The reference member state prepares a draft assessment report and drafts of the related materials within 210 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report and related materials, each concerned member state must decide whether to approve the assessment report and related materials.

If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points are subject to a dispute resolution mechanism and may eventually be referred to the European Commission, whose decision is binding on all member states.

Within this framework, manufacturers may seek approval of hybrid medicinal products under Article 10(3) of Directive 2001/83/EC. Hybrid applications rely, in part, on information and data from a reference product and new data from appropriate pre-clinical tests and clinical trials. Such applications are necessary when the proposed product does not meet the strict definition of a generic medicinal product, or bioavailability studies cannot be used to demonstrate bioequivalence, or there are changes in the active substance(s), therapeutic indications, strength, pharmaceutical form or route of administration of the generic product compared to the reference medicinal product. In such cases the results of tests and trials must be consistent with the data content standards required in the Annex to the Directive 2001/83/EC, as amended by Directive 2003/63/EC.

Hybrid medicinal product applications have automatic access to the centralized procedure when the reference product was authorized for marketing via that procedure. Where the reference product was authorized via the decentralized procedure, a hybrid application may be accepted for consideration under the centralized procedure if the applicant shows that the medicinal product constitutes a significant therapeutic, scientific or technical innovation, or the granting of a community authorization for the medicinal product is in the interest of patients at the community level.

Clinical Trial Approval in the European Union

Requirements for the conduct of clinical trials in the European Union including Good Clinical Practice, or GCP, are set forth in the Clinical Trials Directive 2001/20/EC and the GCP Directive 2005/28/EC. Pursuant to Directive 2001/20/EC and Directive 2005/28/EC, as amended, a system for the approval of clinical trials in the European Union has been implemented through national legislation of the E.U. member states. Under this system, approval must be obtained from the competent national authority of each E.U. member state in which a study is planned to be conducted. To this end, a CTA is submitted, which must be supported by an investigational medicinal product dossier, or IMPD, and further supporting information prescribed by Directive 2001/20/EC and Directive 2005/28/EC and other applicable guidance documents. Furthermore, a clinical trial may only be started after a competent ethics committee has issued a favorable opinion on the clinical trial application in that country.

In April 2014, the E.U. passed the new Clinical Trials Regulation, (EU) No 536/2014, which will replace the current Clinical Trials Directive 2001/20/EC. To ensure that the rules for clinical trials are identical throughout the European Union, the new E.U. clinical trials legislation was passed as a regulation that is directly applicable in all E.U. member states. All clinical trials performed in the European Union are required to be conducted in accordance with the Clinical Trials Directive 2001/20/EC until the new Clinical Trials Regulation (EU) No 536/2014 becomes applicable. According to the current plans of EMA, the new Clinical Trials Regulation will become applicable in October 2018. The Clinical Trials Directive 2001/20/EC will, however, still apply three years from the date of entry into application of the Clinical Trials Regulation to (i) clinical trials applications submitted before

the entry into application and (ii) clinical trials applications submitted within one year after the entry into application if the sponsor opts for old system.

The new Clinical Trials Regulation aims to simplify and streamline the approval of clinical trial in the European Union. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, the E.U. portal; a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures that will spare sponsors from submitting broadly identical information separately to various bodies and different member states; a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts (Part I is assessed jointly by all member states concerned, and Part II is assessed separately by each member state concerned); strictly defined deadlines for the assessment of clinical trial applications; and the involvement of the ethics committees in the assessment procedure in accordance with the national law of the member state concerned but within the overall timelines defined by the Clinical Trials Regulation.

Periods of Authorization and Renewals

Marketing authorization is valid for five years in principle and the marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the authorizing member state. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal. Any authorization which is not followed by the actual placing of the drug on the European Union market (in case of centralized procedure) or on the market of the authorizing member state within three years after authorization ceases to be valid (the so-called sunset clause).

Data and Market Exclusivity in the European Union

In the European Union, new chemical entities qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. This data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, but not approved for two years. The overall ten-year period will be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity and the sponsor is able to gain the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company can complete a full MAA with a complete database of pharmaceutical test, preclinical tests and clinical trials and obtain marketing approval of its product.

Orphan Drug Designation and Exclusivity

Regulation 141/2000 provides that a drug shall be designated as an orphan drug if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the European Community when the application is made, or that the product is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the

European Community and that without incentives it is unlikely that the marketing of the drug in the European Community would generate sufficient return to justify the necessary investment. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Community or, if such method exists, the drug will be of significant benefit to those affected by that condition.

Regulation 847/2000 sets out criteria and procedures governing designation of orphan drugs in the European Union. Specifically, an application for designation as an orphan product can be made any time prior to the filing of an application for approval to market the product. Marketing authorization for an orphan drug leads to a ten-year period of market exclusivity. This period may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation, for example because the product is sufficiently profitable not to justify market exclusivity. Market exclusivity can be revoked only in very selected cases, such as consent from the marketing authorization holder, inability to supply sufficient quantities of the product, demonstration of "clinically relevant superiority" by a similar medicinal product, or, after a review by the Committee for Orphan Medicinal Products, requested by a member state in the fifth year of the marketing exclusivity period (if the designation criteria are believed to no longer apply). Medicinal products designated as orphan drugs pursuant to Regulation 141/2000 shall be eligible for incentives made available by the European Community and by the member states to support research into, and the development and availability of, orphan drugs.

Regulatory Requirements after Marketing Authorization

As in the United States, both marketing authorization holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA and the competent authorities of the individual EU Member States both before and after grant of the manufacturing and marketing authorizations. The holder of an EU marketing authorization for a medicinal product must, for example, comply with EU pharmacovigilance legislation and its related regulations and guidelines which entail many requirements for conducting pharmacovigilance, or the assessment and monitoring of the safety of medicinal products. The manufacturing process for medicinal products in the European Union is also highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations. Manufacturing requires a manufacturing authorization, and the manufacturing authorization holder must comply with various requirements set out in the applicable EU laws, including compliance with EU cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients.

In the European Union, the advertising and promotion of approved products are subject to EU Member States' laws governing promotion of medicinal products, interactions with clinicians, misleading and comparative advertising and unfair commercial practices. In addition, other legislation adopted by individual EU Member States may apply to the advertising and promotion of medicinal products. These laws require that promotional materials and advertising in relation to medicinal products comply with the product's Summary of Product Characteristics, or SmPC, as approved by the competent authorities. Promotion of a medicinal product that does not comply with the SmPC is considered to constitute off-label promotion, which is prohibited in the European Union.

Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. Sales of products will depend, in part, on the extent to which third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations, provide coverage, and establish adequate reimbursement levels for, such products. The process for determining whether a

payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the prices charged, examining the medical necessity, and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. Nonetheless, product candidates may not be considered medically necessary or cost effective. Additionally, a payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Third-party reimbursement may not be sufficient to maintain price levels high enough to realize an appropriate return on investment in product development.

The containment of healthcare costs also has become a priority of federal, state and foreign governments and the prices of drugs have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. 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 a company or its collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Outside the United States, ensuring adequate coverage and payment for our product candidates will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that drug products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular drug candidate to currently available therapies. For example, the European Union provides options for its member states to restrict the range of drug products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union member states may approve a specific price for a drug product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the drug product on the market. Other member states allow companies to fix their own prices for drug products, but monitor and control company profits. The downward pressure on healthcare costs in general, particularly prescription drugs, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert competitive pressure that may reduce pricing within a country. Any country that has price controls or reimbursement limitations for drug products may not allow favorable reimbursement and pricing arrangements.

Healthcare Law and Regulation

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products that are granted regulatory approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Such restrictions under applicable federal and state healthcare laws and regulations, include the following:

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

- the federal civil and criminal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal laws that prohibit, among other things, knowingly and willingly executing, or attempting to execute, a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, which also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services, or CMS, within the U.S. Department of Health and Human Services, information related to payments and other transfers of value to clinicians and teaching hospitals and clinician ownership and investment interests; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private 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 information related to payments to clinicians and other healthcare providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Healthcare Reform

A primary trend in the United States healthcare industry and elsewhere is cost containment. There have been several 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.

In March 2010, the United States Congress enacted the Affordable Care Act, or ACA, which, among other things, includes changes to the coverage and payment for products under government healthcare programs. Among the provisions of the ACA of importance to our potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, 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;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices and extending rebate liability to prescriptions for individuals enrolled in Medicare Advantage plans;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expanded the types of entities eligible for the 340B drug discount program;
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- 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 Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. However, the IPAB implementation has been not been clearly defined. The ACA provided that under certain circumstances, IPAB recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings; and
- established the Center for Medicare and Medicaid Innovation within 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.

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 will remain in effect through 2024 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.

With the new Administration and Congress, there may be additional legislative changes, including potentially repeal and replacement of certain provisions of the ACA. It remains to be seen, however, whether new legislation will be enacted and, if so, precisely what any new legislation will provide and what impact it will have on the availability of healthcare and containing or lowering the cost of healthcare. It is possible that any repeal and replacement initiatives, if enacted into law, could ultimately result in fewer individuals having health insurance coverage or in individuals having insurance coverage with less generous benefits. While the timing and scope of any potential future legislation to repeal and replace ACA provisions is highly uncertain in many respects, it is also possible that some of the ACA provisions that generally are not favorable for the research-based pharmaceutical industry could also be repealed along with ACA coverage expansion provisions.

Employees

As of February 28, 2017, we had 23 full-time employees, including a total of nine employees with M.D., Sc.D. or Ph.D. degrees. Of these full-time employees, 17 employees are engaged in research and development. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Facilities

Our principal facilities consist of office and laboratory space. We occupy approximately 11,747 square feet of office space in Waltham, Massachusetts under a lease that currently expires in January 2019.

Legal Proceedings

We are not currently subject to any material legal proceedings.

MANAGEMENT

The following table sets forth the name, age as of February 28, 2017 and position of each of our executive officers and directors.

Name	Age	Position
Mark Iwicki	50	Chief Executive Officer and Chairman of the Board
Charles McDermott	45	President and Chief Business Officer
Kim Brazzell, Ph.D.	64	Chief Medical Officer
Hongming Chen, Sc.D.	45	Chief Scientific Officer
Mary Reumuth, C.P.A.	41	Senior Vice President, Finance and Corporate Controller and Treasurer
Michele LaRussa	46	Senior Vice President, Regulatory Affairs and Quality Assurance
Kevin Bitterman, Ph.D.	40	Director
Gregory Grunberg, M.D.	44	Director
Robert Langer, Sc.D.	68	Director
Robert Paull	40	Director
Howard Rosen	59	Director
Rajeev Shah	39	Director
Robert Tepper, M.D.	61	Director
Chen Yu, M.D.	43	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Nominating and Corporate Governance Committee.

Mark Iwicki has served as our Chief Executive Officer and Chairman of our board of directors since September 2015. Previously he served as Executive Chairman of our board of directors from April 2015 to September 2015. Prior to joining us, Mr. Iwicki served as President and Chief Executive Officer of Civitas Therapeutics, Inc., or Civitas, a biopharmaceutical company which was acquired by Acorda Therapeutics, from January 2014 to November 2014. Prior to Civitas, Mr. Iwicki served as President and Chief Executive Officer at Blend Therapeutics, Inc., or Blend, a biopharmaceutical company, from December 2012 to January 2014. Prior to Blend, Mr. Iwicki was President and Chief Executive Officer of Sunovion Pharmaceuticals Inc. (formerly Sepracor Inc.), or Sunovion, a pharmaceutical company. Mr. Iwicki was at Sepracor/Sunovion from October 2007 to June 2012. Prior to joining Sepracor Inc., Mr. Iwicki was Vice President and Business Unit Head at Novartis Pharmaceuticals Corporation. He was at Novartis from March 1998 to October 2007. Prior to that, Mr. Iwicki held management positions at Astra Merck Inc. and Merck & Co., Inc. In addition to serving on our board of directors, Mr. Iwicki also currently serves on the boards of AimmuneTherapeutics, Inc., Merus N.V. and Pulmatrix Inc., all public companies, and privately held companies Nimbus Therapeutics, Inc., Taris Biomedical LLC, and Oxeia Biopharmaceuticals, Inc. Mr. Iwicki holds a B.S. in Business Administration from Ball State University and an M.B.A. from Loyola University. We believe that Mr. Iwicki's extensive experience as a pharmaceutical industry leader managing all stages of drug development and commercialization in multiple therapeutic areas qualifies him to serve as a member of our board of directors.

Charles McDermott has served as our President and Chief Business Officer since June 2015. Previously he served as our Interim President and Chief Business Officer from October 2014 to June 2015 and our Executive Vice President of Development from June 2013 to October 2014. Prior to joining us, Mr. McDermott served first as Director and then Vice President of Business Development,

Eye Care and Drug Delivery at Allergan plc, or Allergan, an ophthalmic industry leader, where he worked from April 2005 to May 2013. Prior to joining Allergan, Mr. McDermott held a variety of business development positions at deCODE Genetics, Inc. (now DGI resolutions, Inc.), or deCODE Genetics, a biopharmaceutical company, from January 2001 to March 2005. Prior to deCODE Genetics, Mr. McDermott was a research scientist in the angiogenesis pharmacology group at Agouron Pharmaceuticals, Inc. Mr. McDermott currently serves on the board of Impact Biomedicines, Inc., a private company. Mr. McDermott holds an M.B.A. from the University of San Diego, an M.A. in Molecular, Cellular and Developmental Biology from the University of California at Santa Barbara, a B.S. in Biochemistry and Molecular Biology from the University of California Santa Cruz and a Certificate in Clinical Trial Design and Management from the University of California San Diego Extension.

Kim Brazzell, Ph.D. has served as our Chief Medical Officer since February 2013. He has also served as a Principal of Acuity Advisors, LLC, an ophthalmic consulting company, since January 2014. Dr. Brazzell served as Chief Medical Officer of Mimetogen Pharmaceuticals, Inc., a clinical stage biotechnology company, from January 2012 until December 2015. Dr. Brazzell also held several executive positions at Inspire Pharmaceuticals, Inc., or Inspire, a specialty pharmaceutical company focusing on ophthalmic products, including Executive Vice President of Medical and Scientific Affairs from 2010 to 2011, Executive Vice President and Head of Ophthalmology Business from 2009 to 2010, and Senior Vice President of Ophthalmic Research and Development from 2004 to 2008. Prior to joining Inspire, Dr. Brazzell served as Global Head of Clinical R&D and Senior Vice President, U.S. R&D, of Novartis Ophthalmics AG from 2000 to 2004. Dr. Brazzell also served as Vice President, R&D at Ciba Vision Ophthalmics, Inc. and as Associate Director, R&D, at Alcon Laboratories, Inc. Dr. Brazzell received a B.S. in Pharmacy and a Ph.D. in Pharmaceutical Sciences from the University of Kentucky.

Hongming Chen, Sc.D. has served as our Chief Scientific Officer since October 2014. Prior to that, Dr. Chen served as our Executive Vice President of Research from October 2013 to October 2014 and our Vice President of Research from January 2010 to October 2013. Prior to joining us, Dr. Chen served as Director of Formulation Development at TransForm Pharmaceuticals Inc., or TransForm, from 2000 to January 2010. Before joining TransForm, Dr. Chen conducted vaccine delivery research and development at AstraZeneca plc from 1997 to 2000, and at Merck & Co., Inc. from 1996 to 1997. In 2015, Dr. Chen was elected to the College of Fellows at the American Institute for Medical and Biological Engineering. Dr. Chen received a B.S. in Chemical Engineering from The University of Texas at Austin in 1992 and both an M.S. and a Sc.D. in Chemical Engineering from the Massachusetts Institute of Technology.

Mary Reumuth, C.P.A. has served as our Senior Vice President, Finance since February 2017, our Vice President, Finance from December 2014 to February 2017 and as our Corporate Controller and Treasurer since February 2014. Prior to joining us, Ms. Reumuth acted as an independent financial consultant from November 2012 to January 2014 and, prior to that, served as Corporate Controller for Enobia Pharma Corp., or Enobia, a global biopharmaceutical company acquired by Alexion Pharmaceuticals, Inc., from May 2011 to June 2012. Prior to Enobia, Ms. Reumuth served as Director of Finance at Verenium Corporation, or Verenium, a biotechnology company, from December 2007 to March 2011. Ms. Reumuth held a variety of finance and accounting positions at Genzyme Corporation, or Genzyme, (now a Sanofi Company), and ILEX Oncology, Inc., or ILEX (acquired by Genzyme) from 2001 to 2007. Prior to ILEX, Ms. Reumuth was an auditor at Ernst & Young LLP. Ms. Reumuth earned her Bachelor's degree in Business Administration from Texas A&M University—Corpus Christi, and is a Certified Public Accountant.

Michele LaRussa has served as our Senior Vice President, Regulatory Affairs and Quality Assurance since October 2016. Prior to joining us, Ms. LaRussa served as Global Head of Regulatory Affairs, Dermatology at GlaxoSmithKline plc from July 2012 to September 2016, where she led a cross-

functional, multi-national team to develop new chemical entities and integrate groups and technologies from a recent acquisition into GlaxoSmithKline's existing structure, and at Allergan from September 2007 to June 2012, where she led the review and approval procedures for three new chemical entities. Ms. LaRussa spent much of her career with Novartis (including CIBA Vision Ophthalmics, Inc, Novartis Ophthalmics AG, and Novartis AG) with increasing levels of responsibility in regulatory affairs from October 1994 to July 2007, including leading the Regulatory Affairs Dermatology Department, holding lead responsibility for BOTOX, Latisse and Aczone and submitting and gaining approval for an additional indication for BOTOX. Ms. LaRussa received a B.S. in Chemistry from the University of South Florida.

Kevin Bitterman, Ph.D. has served as a member of our board of directors since December 2009. Dr. Bitterman is a General Partner at Polaris Partners, or Polaris, where he has been since 2004 and has focused on investments in life sciences companies. Prior to joining Polaris, Dr. Bitterman completed his Ph.D. in genetics at Harvard Medical School. Dr. Bitterman is a co-founder of Sirtris Pharmaceuticals, Inc. acquired by GlaxoSmithKline plc and was the founding Chief Executive Officer at Visterra, Inc., Editas Medicine, Inc., or Editas, and Morphic Therapeutic. Dr. Bitterman currently serves as a director of Editas, a public company, as well as private companies Espacing Inc., KSQ Therapeutic, Neuronetics, Inc., TARIS Biomedical LLC, Direct Vet Marketing, Inc. and Morphic Therapeutic. Additionally, Dr. Bitterman serves on the Scientific Advisory Board of the Massachusetts Life Sciences Center and on the board of directors of the New England Venture Capital Association. He received a Ph.D. in genetics from Harvard Medical School and a B.A. in biology from Rutgers College. We believe that Dr. Bitterman's extensive experience investing in, guiding and leading start up and early phase companies, as well as his experience as a director of other private and public companies, qualifies him to serve as a member of our board of directors.

Gregory Grunberg, M.D. has served as a member of our board of directors since April 2016. Dr. Grunberg has been the Managing Director of Longitude Capital Management Co., LLC, or Longitude, since 2012 and has focused on medical technology and drug development. Prior to joining Longitude, Dr. Grunberg was a Principal of Rho Ventures at Rho Capital Partners, Inc. Dr. Grunberg serves as a director of Baronova and California Cryobank, Inc., and has previously served as a director of AqueSys, Inc. and as a Board Observer at SARCode Bioscience Inc., PHT Corporation, Crosstrees Medical, Inc. and Nora Therapeutics, Inc. Dr. Grunberg is also a Lecturer in Medicine at Cornell University and an Attending Faculty member at Albert Einstein University. Dr. Grunberg is Board Certified in Internal Medicine and trained at Cornell's New York Presbyterian Hospital. He has maintained a limited clinical practice in Internal Medicine and affiliations with University of California, San Francisco, Kaiser, Albert Einstein, U. Miami, Weill-Cornell, and the Weill-Cornell Buganda Medical School in Tanzania. Dr. Grunberg received an M.D. and an M.B.A. from Duke University, where he was a Fuqua Scholar, and an A.B. degree from Amherst College. We believe that Dr. Grunberg's extensive experience investing in and guiding start-up and early phase companies, as well as his experience in the medical field, qualify him to serve as a member of our board of directors.

Robert Langer, Sc.D. has served as a member of our board of directors since December 2009. Dr. Langer has been an Institute Professor at the Massachusetts Institute of Technology, or MIT, since 2005, and prior to that was a Professor at MIT since 1977. Dr. Langer received his B.S. from Cornell University and his Sc.D. from MIT both in Chemical Engineering. Dr. Langer currently serves on the board of directors of UK public company Puretech Health plc, and previously served on the board of directors of public companies Momenta Pharmaceuticals, Inc., from 2001 to 2009, Wyeth Vaccines from 2004 to 2009, Fibrocell Science, Inc. from 2010 to 2012 and Millipore Corp. from 2009 to 2010. Dr. Langer also served as a director on the Food and Drug Administration Science Board from 1995 to 2002, including his service as chairman from 1999 to 2002. We believe that Dr. Langer's pioneering academic work, and his extensive medical and scientific knowledge and experience and his previous

service on public company boards of directors qualify him to serve as a member of our board of directors.

Robert Paull has served as a member of our board of directors since July 2009. Mr. Paull is a Co-founder and Venture Partner at Lux Capital Management, or Lux Capital, where he has been since October 2004 and has focused on ventures in healthcare. In addition to joining Lux Capital, Mr. Paull served as our founding Chief Executive Officer, President and Treasurer from July 2009 to June 2012. Mr. Paull also served as founding Chief Executive Officer of Genocea Biosciences Inc., a vaccine discovery and development company, from August 2006 to February 2009, and is the co-founder of Lux Research, Inc., an emerging technology market research and consulting firm, which was founded in January 2004. Mr. Paull holds a B.S. in Architecture from the University of Virginia. We believe that Mr. Paull's extensive experience guiding and investing in healthcare ventures qualifies him to serve as a member of our board of directors.

Howard Rosen has served as a member of our board of directors since January 2014. Since 2008, Mr. Rosen has served as a consultant to several companies in the biotechnology industry. He has also served as a lecturer at Stanford University in Chemical Engineering since 2009 and in Management since 2011. Mr. Rosen served as Chief Executive Officer of AcelRx Pharmaceuticals, Inc., or AcelRx, a public company developing products for pain relief, from April 2016 to March 2017, and Interim Chief Executive Officer from April 2015 to March 2016. Mr. Rosen also served as Interim President and Chief Executive Officer of Pearl Therapeutics, Inc. from June 2010 to March 2011. From 2004 to 2008, Mr. Rosen was Vice President of Commercial Strategy at Gilead Sciences, Inc., a biopharmaceutical company. Mr. Rosen was President of ALZA Corporation, a pharmaceutical and medical systems company that merged with Johnson & Johnson, a global healthcare company, in 2001, from 2003 until 2004. Prior to that, from 1994 until 2003, Mr. Rosen held various positions at ALZA Corporation. Mr. Rosen is chairman of the board of directors of Alcobra, Ltd. and AcelRx, both public companies, and also serves on the board of directors of ALDEA Pharmaceuticals, Inc., a private company. Mr. Rosen is also currently a member of the board of directors of private biotechnology company Entrega, Inc. Mr. Rosen holds a B.S. in Chemical Engineering from Stanford University, an M.S. in Chemical Engineering from the Massachusetts Institute of Technology and an M.B.A. from the Stanford Graduate School of Business. We believe that Mr. Rosen's experience in the biopharmaceutical industry, including his specific experience with the development and commercialization of pharmaceutical products, qualifies him to serve as a member of our board of directors.

Rajeev Shah has served as a member of our board of directors since July 2015. Mr. Shah has been a Managing Director and Portfolio Manager at RA Capital Management, LLC, or RA Capital, since 2004. Prior to joining RA Capital, Mr. Shah was a Senior Project Leader at Altus Pharmaceuticals Inc., a spin-off of Vertex Pharmaceuticals Inc., from 2001 to 2004. Mr. Shah is currently a member of the board of directors of the public companies Ra Pharmaceuticals, Inc. and Kalvista Pharmaceuticals, Inc. and of the private company Satsuma Pharmaceuticals, Inc. Mr. Shah holds a B.A. in Chemistry with a concentration in Economics from Cornell University. We believe that Mr. Shah's experience with biotechnology companies qualifies him to serve as a member of our board of directors.

Robert Tepper, M.D. has served as a member of our board of directors since December 2009. Dr. Tepper is a General Partner of Third Rock Ventures, L.P., or Third Rock, which he co-founded in March 2007 and focuses on the formation, development and scientific strategy of Third Rock's portfolio companies, as well as actively identifying and evaluating new investments. Prior to joining Third Rock, Dr. Tepper served as President of Research and Development at Millennium Pharmaceuticals, Inc., or Millennium. Prior to joining Millennium in 1994, he served as principal investigator in the laboratory of tumor biology at the Massachusetts General Hospital Cancer Center. Dr. Tepper is also a founder and former member of the scientific advisory board of Cell Genesys/Abgenix Inc. Dr. Tepper serves as an adjunct faculty member at Harvard Medical School and Massachusetts General Hospital and is an

advisory board member of several healthcare institutions, including the Partners HealthCare Center for Personalized Genetic Medicine, Harvard Medical School and Tufts Medical School. Dr. Tepper is a board member of the public company Jounce Therapeutics, Inc. and was previously a board member of the public company bluebird bio, Inc. from 2010 to 2015. Dr. Tepper is currently a board member of private life sciences companies Allena Pharmaceuticals, Inc., Constellation Pharmaceuticals Inc. and Neon Therapeutics, Inc. Dr. Tepper also serves on the board of overseers at Tufts University and on the Council of the National Center for Advancing Translational Sciences at the National Institutes of Health. Dr. Tepper holds an A.B. in biochemistry from Princeton University and an M.D. from Harvard Medical School. We believe that Dr. Tepper's experience in the venture capital industry, particularly with biotech and pharmaceutical companies, combined with his experience building and operating research and development operations, on the boards of public and private life sciences companies and as faculty and advisory board member of several healthcare institutions, qualify him to serve as a member of our board of directors.

Chen Yu, M.D. has served as a member of our board of directors since April 2016. Dr. Yu has been a Managing Partner at Vivo Capital LLC, or Vivo, since 2011. Prior to joining Vivo in 2004, Dr. Yu worked at aQuantive, a private technology company. Dr. Yu has served as Chief Business Officer at China KangHui, a leading China based orthopedic company, and as Chief Operating Officer at Sagent Pharmaceuticals. Dr. Yu currently serves or has served on the boards of several private life science companies in both the United States and China, including SentreHeart, Rempex Pharmaceuticals, Nora Therapeutics, Jian Rui Bao Beijing GMT Science & Technology Development Co., Ltd, Outpost Medicine, LLC, PrinJohnson BioPharma, Inc., Nabriva Therapeutics, and Synaptic Medical. Dr. Yu currently serves on the California Leadership Council for the Nature Conservancy, an environmental non-profit with global reach, and was previously a member of the Stanford Medical School Alumni Board of Governors. Dr. Yu received his M.D. and M.B.A. from Stanford University and graduated magna cum laude with a B.A. in Biology from Harvard University. We believe that Dr. Yu's experience in the venture capital industry, his extensive operational and business experience, and his experience on the boards of public and private life sciences companies qualify him to serve as a member of our board of directors.

Board Composition and Election of Directors

Board Composition

Our board of directors is currently authorized to have nine members and currently consists of nine members. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Our certificate of incorporation and bylaws that will become effective upon the closing of this offering provide that the authorized number of directors may be changed only by resolution of our board of directors. Our certificate of incorporation and bylaws will also provide that our directors may be removed only for cause by the affirmative vote of the holders of 75% of our shares of capital stock present in person or by proxy and entitled to vote, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

In accordance with the terms of our certificate of incorporation and bylaws that will become effective upon the closing of this offering, our board of directors will be divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms. Upon the closing of this offering, the members of the classes will be divided as follows:

- the class I directors will be , and , and their term will expire at the annual meeting of stockholders to be held in ;

- the class II directors will be , and , and their term will expire at the annual meeting of stockholders to be held in ; and
- the class III directors will be , and , and their term will expire at the annual meeting of stockholders to be held in .

Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

The classification of our board of directors may have the effect of delaying or preventing changes in our control or management. See "Description of Capital Stock—Delaware Anti-Takeover Law and Certain Charter and Bylaw Provisions."

Director Independence

Applicable NASDAQ rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under applicable NASDAQ rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and (2) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In 2017, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Mark Iwicki, is an "independent director" as defined under applicable NASDAQ rules. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each non-employee director. Mr. Iwicki is not an independent director under these rules because he is our Chief Executive Officer.

There are no family relationships among any of our directors or executive officers.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which operates under a charter that has been approved by our board. The composition of each committee will be effective as of the date of this prospectus.

Audit Committee

The members of our audit committee are , and . is the chair of the audit committee. Our audit committee's responsibilities will include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by Securities and Exchange Commission, or SEC, rules.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that is an "audit committee financial expert" as defined in applicable SEC rules. We believe that the composition of our audit committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Compensation Committee

The members of our compensation committee are , and . is the chair of the compensation committee. Our compensation committee's responsibilities will include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;

- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis" disclosure if and to the extent then required by SEC rules; and
- preparing the compensation committee report if and to the extent then required by SEC rules.

We believe that the composition of our compensation committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are , and . is the chair of the nominating and corporate governance committee. Our nominating and corporate governance committee's responsibilities will include:

- recommending to our board of directors the persons to be nominated for election as directors and to each of our board's committees;
- reviewing and making recommendations to our board with respect to our board leadership structure;
- reviewing and making recommendations to our board with respect to management succession planning;
- developing and recommending to our board of directors corporate governance principles; and
- overseeing a periodic evaluation of our board of directors.

We believe that the composition of our nominating and corporate governance committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

Code of Ethics and Code of Conduct

We intend to adopt a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We intend to post a current copy of the code on our website, www.kalarx.com. In addition, we intend to post on our website all disclosures that are required by law or NASDAQ stock market listing standards concerning any amendments to, or waivers from, any provision of the code.

EXECUTIVE COMPENSATION

The following discussion relates to the compensation of our Chief Executive Officer, Mark Iwicki, our Chief Medical Officer, Kim Brazzell, and our Chief Scientific Officer, Hongming Chen, for fiscal years 2015 and 2016. These three individuals are collectively referred to in this prospectus as our named executive officers. Each year, our compensation committee and board of directors review and determine the compensation of our named executive officers.

In preparing to become a public company, we have begun a thorough review of all elements of our executive compensation program, including the function and design of our equity incentive programs. We have begun, and expect to continue in the coming months, to evaluate the need for revisions to our executive compensation program to ensure that our program is competitive with the companies with which we compete for executive talent and is appropriate for a public company.

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by or paid to each of our named executive officers for the years ended December 31, 2015 and 2016, respectively.

Name and Principal Position	Year	Salary ($)	Bonus ($)(1)	Option awards ($)(2)	All other compensation ($)(3)	Total ($)
Mark Iwicki	2016	472,738	254,300	1,533,531	1,298	2,261,867
Chief Executive Officer	2015	251,440	220,200	2,042,369	946	2,514,955
Kim Brazzell, M.D.	2016	340,973	141,750	375,055	1,710	859,488
Chief Medical Officer						
Hongming Chen, Sc.D.	2016	322,086	129,944	356,370	1,710	810,110
Chief Scientific Officer	2015	310,000	104,160	77,710	1,657	493,527

(1) Except where noted, the amounts reported in the "Bonus" column reflect discretionary annual cash bonuses payable to our executive officers for their performance.

(2) The amounts reported in the "Option awards" column reflect the aggregate fair value of stock-based compensation awarded during the year computed in accordance with the provisions of FASB ASC Topic 718. See Note 10 to our financial statements appearing at the end of this prospectus regarding assumptions underlying the valuation of equity awards.

(3) The compensation included in the "All other compensation" column consists of premiums we paid to each of our named executive officers for life insurance.

Narrative to Summary Compensation Table

In 2015, we paid Mr. Iwicki an annualized base salary of $250,000 beginning in April 2015, which was increased to $455,000 in September 2015, upon his appointment as Chief Executive Officer. In 2016, we paid Mr. Iwicki an annualized base salary of $470,925. In February 2017, our board of directors set Mr. Iwicki's 2017 annual base salary at $487,408. In 2016, we paid Dr. Brazzell an annualized base salary of $350,000. In February 2017, our board of directors set Dr. Brazzell's 2017 annual base salary at $362,250. In 2015, we paid Dr. Chen an annualized base salary of $310,000, and in 2016 we paid Dr. Chen an annualized base salary of $320,850. In February 2017, our board of directors set Dr. Chen's 2017 annual base salary at $332,080.

We use base salaries to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our named executive officers. None of our named executive officers is currently party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary.

Performance-based bonuses, which are calculated as a percentage of base salary, are designed to motivate our employees to achieve annual goals based on our strategic, financial and operating performance objectives. From time to time, our board of directors has approved discretionary annual cash bonuses to our named executive officers with respect to their prior year performance.

Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, or any formal equity ownership guidelines applicable to them, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants with a time-based vesting feature promote executive retention because this feature incents our executive officers to remain in our employment during the vesting period. Accordingly, our board of directors periodically reviews the equity incentive compensation of our named executive officers and from time to time may grant equity incentive awards to them in the form of stock options. In 2015, based upon our overall performance, we granted to Mr. Iwicki options to purchase 3,392,379 shares of our common stock, to Dr. Brazzell options to purchase 80,368 shares of our common stock, and to Dr. Chen options to purchase 111,622 shares of our common stock. In 2016, based upon our overall performance, we granted to Mr. Iwicki options to purchase 3,176,081 shares of our common stock, to Dr. Brazzell options to purchase 844,450 shares of our common stock, and to Dr. Chen options to purchase 805,388 shares of our common stock.

Prior to this offering, our executives were eligible to participate in our 2009 Employee, Director and Consultant Equity Incentive Plan, as amended, or the 2009 Plan. During 2015 and 2016, all stock options were granted pursuant to the 2009 Plan. Following the closing of this offering, our employees and executives will be eligible to receive stock options and other stock-based awards pursuant to the 2017 Stock Incentive Plan.

We use stock options to compensate our executive officers in the form of initial grants in connection with the commencement of employment and also at various times, often but not necessarily annually, if we have performed as expected or better than expected. Prior to this offering, the award of stock options to our executive officers, other than our Chief Executive Officer, has been made by our board or compensation committee, and the award of stock options to our Chief Executive Officer has been made by our board. None of our executive officers is currently party to an employment agreement that provides for automatic award of stock options. We have granted stock options to our executive officers with both time-based and performance-based vesting. The options that we have granted to our executive officers with time-based vesting typically become exercisable as to 25% of the shares underlying the option on the first anniversary of the grant date, and as to an additional 1/48th of the shares underlying the option monthly thereafter. Going forward, we expect annual and other grants made to existing executive officers and employees will vest monthly as to 1/48th of the shares underlying the option. The options that we have granted to date to our executive officers with performance-based vesting become exercisable upon the occurrence of specified business transactions or other specified milestones. Vesting and exercise rights cease shortly after termination of employment except in the case of death or disability and, in certain circumstances upon a change in control. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including no voting rights and no right to receive dividends or dividend equivalents.

We have historically granted stock options with exercise prices that are equal to the fair market value of our common stock on the date of grant as determined by our board of directors, based on a number of objective and subjective factors. The exercise price of all stock options granted after the closing of this offering will be equal to the fair market value of shares of our common stock on the date of grant, which will be determined by reference to the closing market price of our common stock on the date of grant.

Outstanding Equity Awards at December 31, 2016

The following table sets forth information regarding all outstanding stock options and restricted stock held by each of our named executive officers as of December 31, 2016.

	Option Awards				
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Equity incentive plan awards; Number of securities underlying unexercised unearned options (#)	Option exercise price ($)	Option expiration date
Mark Iwicki	591,351	827,892(1)	—	$ 0.64	6/3/2025
	822,140	1,150,996(2)	—	$ 1.00	9/11/2025
	1,307,542	1,868,539(3)	—	$ 0.64	6/17/2026
Kim Brazzell, Ph.D.	184,073	3,917(4)	—	$ 0.13	5/10/2023
	70,500	23,500(5)	—	$ 0.13	5/10/2023
	183,280	142,552(6)	—	$ 0.44	10/2/2024
	23,440	56,928(7)	—	$ 1.00	10/2/2025
		844,450(8)	—	$ 0.64	6/17/2026
Hongming Chen, Sc.D.	26,000	—	—	$ 0.09(9)	6/18/2020
	30,000	—	—	$ 0.09	6/16/2021
	30,000	—	—	$ 0.11	6/26/2022
	24,416	5,635(10)	—	$ 0.43	9/27/2023
	346,879	227,267(11)	—	$ 0.44	10/2/2024
	32,556	79,066(12)	—	$ 1.00	10/2/2025
		805,388(13)	—	$ 0.64	6/17/2026

(1) Mr. Iwicki's option to purchase 1,419,243 shares of common stock vests over four years in equal monthly installments beginning May 8, 2015.

(2) Mr. Iwicki's option to purchase 1,973,136 shares of common stock vests over four years, with 25% of the shares underlying the option vested on April 8, 2016 and 2.0833% of the shares vesting monthly thereafter.

(3) Mr. Iwicki's option to purchase 3,176,081 shares of common stock vests over four years, with 2.0833% of the shares underlying the option vested on April 8, 2015 and 2.0833% of the shares vesting monthly thereafter.

(4) Dr. Brazzell's option to purchase 187,990 shares of common stock vests over four years, with 25% of the shares underlying the option vested on January 1, 2014, and 2.0833% of the shares vesting monthly thereafter.

(5) Dr. Brazzell's option to purchase 94,000 shares of common stock vested with respect to 25% of shares underlying the option 12 months after the date we submitted an investigational new drug application for our loteprednol etabonate program and as to an additional 2.0833% of the shares vesting monthly thereafter.

(6) Dr. Brazzell's option to purchase 325,832 shares of common stock vests over four years, with 25% of the shares underlying the option vested on September 25, 2015 and 2.0833% of the shares vesting monthly thereafter.

(7) Dr. Brazzell's option to purchase 80,368 shares of common stock vests over four years, with 25% of the shares underlying the option vested on October 2, 2016 and 2.0833% of the shares vesting monthly thereafter.

(8) Dr. Brazzell's option to purchase 844,450 shares of common stock vests over four years, with 25% of the shares underlying the option vesting on June 17, 2017 and 2.0833% of the shares vesting monthly thereafter.

(9) The original exercise price of this option to purchase 26,000 shares of common stock was $0.17 and was later amended to $0.09.

(10) Dr. Chen's option to purchase 30,051 shares of common stock vests over four years, with 25% of the shares underlying the option vested on September 27, 2014 and 2.0833% of the shares vesting monthly thereafter.

(11) Dr. Chen's option to purchase 574,146 shares of common stock vests over four years, in equal monthly installments, beginning on August 21, 2014.

(12) Dr. Chen's option to purchase 111,622 shares of common stock vests over four years, with 25% of the shares underlying the option vested on October 2, 2016 and 2.0833% of the shares vesting monthly thereafter.

(13) Dr. Chen's option to purchase 805,388 shares of common stock vests over four years, with 25% of the shares underlying the option vesting on June 17, 2017 and 2.0833% of the shares vesting monthly thereafter.

Employment Agreements

Letter Agreement with Mr. Iwicki

Mr. Iwicki was appointed as our Chief Executive Officer and Chairman of our board of directors pursuant to a letter agreement with us dated September 10, 2015, which amended and restated a prior letter agreement. Mr. Iwicki is an at-will employee, and his employment with us can be terminated by him or us at any time and for any reason. In February 2017, Mr. Iwicki's base salary was increased from $470,925 per annum to $487,408 per annum, which is subject to annual review and adjustment by our compensation committee. In addition, Mr. Iwicki is eligible to receive a discretionary bonus in a target amount of 40% of his annual base salary, as determined by our board of directors in its sole discretion.

Subject to his execution and nonrevocation of a release of claims in our favor, in the event of the termination of Mr. Iwicki's employment by us without cause or by him for good reason, each as defined in his employment letter agreement, Mr. Iwicki will be entitled to a lump sum payment in an amount equal to (i) twelve-months of his then-current annual base salary, (ii) any bonus earned for the year prior to the year of termination that has not yet been paid, (iii) an amount equal to 100% of his target bonus attributable to the year of termination, (iv) a pro-rated portion of any bonus attributable to the year of termination based upon performance against company but not individual objectives and (v) twelve months of COBRA premiums for continued health benefit coverage on the same terms as were applicable to him prior to his termination.

In addition, in the event we terminate his employment or other service relationship with us without cause, he terminates his employment or other service relationship with us for good reason, or his employment or other service relationship with us terminates by reason of his death or disability, Mr. Iwicki is entitled to the automatic vesting and exercisability of any unvested options that would have vested if Mr. Iwicki's employment or other service relationship with us had continued for twelve months following such termination. In addition, provided Mr. Iwicki is an employee, member of our board of directors or is otherwise providing services to us at the time of a change of control, as defined

in the letter agreement, or in the event of the termination of Mr. Iwicki's employment by us without cause or by him for good reason in contemplation of a change of control, as defined in the letter agreement, options referenced in the letter agreement will vest in full upon consummation of such change in control. Such options are exercisable for up to 18 months following the termination of his employment or other relationship with us other than a termination for cause. Mr. Iwicki also is entitled to piggyback registration rights with respect to options granted pursuant to his employment letter agreement. See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Letter Agreement with Dr. Brazzell

Dr. Brazzell was appointed to serve on a full-time basis as our Chief Medical Officer pursuant to a letter agreement with us dated May 10, 2016, which amended and restated a prior letter agreement. Dr. Brazzell is an at-will employee, and his employment with us can be terminated by him or us at any time and for any reason. In February 2017, Dr. Brazzell's base salary was increased from the $350,000 per annum to $362,250 per annum, which is subject to annual review and adjustment by our compensation committee. In addition, Dr. Brazzell is eligible to receive a discretionary bonus in a target amount of 30% of his annual base salary, as determined by our board of directors in its sole discretion.

Subject to his execution and nonrevocation of a release of claims in our favor, in the event of the termination of Dr. Brazzell's employment by us without cause or by him for good reason, each as defined in his employment letter agreement, Dr. Brazzell will be entitled to a lump sum payment in an amount equal to twelve months of his then-current annual base salary plus a pro-rated portion of any bonus attributable to the year of termination, as well as up to twelve months of COBRA premiums for continued health benefit coverage.

In addition, in the event we terminate his employment without cause or he terminates his employment for good reason, Dr. Brazzell is entitled to the automatic vesting and exercisability of any options and shares granted to him that vest solely based on his continued employment that would have vested if his employment had continued for twelve months following such termination. In the event of a change of control, as defined in his employment letter agreement, during his employment, Dr. Brazzell is entitled to the automatic vesting and exercisability of 100% of any options and restricted shares granted to him that vest solely based on his continued employment. The option referenced in his employment agreement is exercisable for a period of up to six months following his termination date.

Letter Agreement with Dr. Chen

Dr. Chen was appointed as our Chief Scientific Officer pursuant to a letter agreement with us dated August 19, 2014, which amended and restated a prior letter agreement. Dr. Chen is an at-will employee, and her employment with us can be terminated by her or us at any time and for any reason. In February 2017, Dr. Chen's base salary was increased from $320,850 per annum to $332,080 per annum, which is subject to annual review and adjustment by our compensation committee. In addition, Dr. Chen is eligible to receive a discretionary bonus in a target amount of 30% of her annual base salary, as determined by our board of directors in its sole discretion.

In the event of the termination of Dr. Chen's employment by us without cause or by her for good reason, each as defined in her employment letter agreement, Dr. Chen will be entitled to a lump sum payment in an amount equal to ten months of her then-current annual base salary plus a pro-rated portion of any bonus attributable to the year of termination, as well as up to ten months of COBRA premiums for continued health benefit coverage.

In addition, subject to her execution and nonrevocation of a release of claims in our favor, Dr. Chen is entitled to the automatic vesting and exercisability of 100% of any options and restricted

shares granted to her that vest solely based on her continued employment if, during her employment, we terminate her employment without cause or Dr. Chen terminates her employment for good reason or a change of control, as defined in the agreement, occurs and within twelve months following such change of control we or our successor terminate Dr. Chen's employment without cause or she terminates for employment for good reason.

Employee Non-Competition, Non-Solicitation, Confidentiality, and Assignment of Inventions Agreements

Each of our named executive officers has entered into a standard form agreement with respect to non-competition, non-solicitation, confidential information and assignment of inventions. Under this agreement, each executive officer has agreed not to compete with us during his or her employment and for a period of one year after the termination of his or her employment, not to solicit our employees or consultants during his or her employment and for a period of two years after the termination of his or her employment, and to protect our confidential and proprietary information indefinitely. In addition, under this agreement, each executive officer has agreed that we own all inventions, as defined in the agreement, that are developed during such executive officer's employment and for a period of one year after the termination of his or her employment, to the extent such invention is our field of interest, as defined in the agreement. Each executive officer also agreed to assign to us any inventions which were not prepared or originated in the performance of employment but that were provided to us or incorporated into any of our products or systems.

Stock Option and Other Compensation Plans

In this section we describe our 2009 Employee, Director and Consultant Equity Incentive Plan, as amended to date, or the 2009 Plan, and our 2017 Stock Incentive Plan, or the 2017 Plan. Prior to this offering, we granted awards to eligible participants under the 2009 Plan. Following the effectiveness of the registration statement for this offering, we expect to grant awards to eligible participants under the 2017 Plan.

2009 Plan

Our 2009 Plan was adopted by our board of directors and approved by our stockholders on December 11, 2009 and subsequently amended by our board in 2012, 2013, 2014 and 2015. The 2009 Plan provides for the grant of incentive stock options, non-qualified options, shares, restricted or otherwise, of our common stock, and other stock-based awards. We refer to awards granted under our 2009 Plan as stock rights. Our employees, directors and consultants are eligible to receive stock rights under our 2009 Plan; however incentive stock options may only be granted to our employees who are deemed to be residents of the United States. As of December 31, 2016, a maximum of 19,333,170 shares of our common stock, or the equivalent of such number after our board of directors makes any adjustments upon any change in capitalization or corporate transaction, were authorized for issuance under the 2009 Plan.

The type of stock right granted under our 2009 Plan and the terms of such stock right are set forth in the applicable stock right award agreement.

Pursuant to the 2009 Plan, our board of directors (or a committee to which our board delegates its authority) administers the 2009 Plan. Subject to the provisions of the 2009 Plan, our board of directors is authorized to:

- interpret the provisions of the 2009 Plan and all stock rights and make all rules and determinations that it deems necessary or advisable for the administration of the 2009 Plan;
- determine which employees, directors and consultants will be granted stock rights;
- determine the number of shares of our common stock for which a stock right will be granted;

- specify the terms and conditions upon which a stock right may be granted;
- amend any term or condition of an outstanding stock right, including, without limitation, to reduce or increase the exercise price or purchase price, accelerate the vesting or extend the expiration date, provided that no such change will impair a participant's rights under any prior grant unless we obtain the participant's consent;
- purchase and/or cancel a stock right previously granted and grant other stock rights in substitution, which may cover the same or a different number of shares and which may have a lower or higher exercise or purchase price per share, based on such terms and conditions as the board of directors establishes and the participant accepts; and
- adopt any sub-plans applicable to residents of any specified jurisdiction as it deems necessary or appropriate to facilitate the 2009 Plan or to comply with or take advantage of any tax or other laws applicable to us, any of our affiliates, or to participants, which sub-plans may include additional restrictions or conditions applicable to stock rights or shares issuable pursuant to a stock right.

Effect of certain changes in capitalization

If our shares of common stock are subdivided or combined into a greater or smaller number of shares, if we issue shares of common stock as a stock dividend, or if we make any distribution of additional, new or different shares or securities of ours or any distribution of non-cash assets with respect to our shares of common stock, then, subject to the terms of the 2009 Plan, our board of directors shall proportionately and appropriately adjust:

- the number of shares of our common stock available for issuance under the 2009 Plan;
- the number of shares of our common stock deliverable upon the exercise of an option or acceptance of a stock grant;
- the exercise or purchase price per share; and
- any other term or condition of a stock right.

Effect of certain corporate transactions

In the event that we are consolidated with or acquired by another entity in a merger, consolidation, or sale of all or substantially all of our assets (other than a transaction to merely change the state of incorporation), which we refer to as corporate transactions, our board of directors, or the board of directors of any entity assuming our obligations under the 2009 Plan, must take one of the following actions pursuant to the 2009 Plan as to outstanding options, subject to the terms of the 2009 Plan:

- provide for the continuation of the outstanding options by equitably substituting for the shares of our common stock then underlying such options either with securities of any successor or acquiring entity or the consideration payable with respect to the outstanding shares of our common stock in connection with the corporate transaction;
- provide by written notice to the participants that the outstanding options will terminate unless exercised (to the extent then exercisable or made partially or fully exercisable by our board of directors for purposes of the corporate transaction) within a specified period following the date of the notice; or
- terminate each outstanding option in exchange for a payment equal to the consideration payable upon consummation of the corporate transaction to a holder of the number of shares of our common stock into which such option would have been exercisable (to the extent then

exercisable or made partially or fully exercisable by our board of directors for purposes of the corporate transaction), minus the aggregate exercise price of such option.

If there is a corporate transaction, our board of directors, or the board of directors of any entity assuming our obligations under the 2009 Plan, must take one of the following actions pursuant to the 2009 Plan as to outstanding stock grants, restricted or otherwise, subject to the terms of the 2009 plan:

- provide for the continuation of the outstanding stock grants on the same terms and conditions by equitably substituting for the shares of our common stock then subject to such stock grants either with securities of any successor or acquiring entity or the consideration payable with respect to the outstanding shares of our common stock in connection with the corporate transaction; or

- provide that each outstanding stock grant will terminate in exchange for a payment equal to the consideration payable upon consummation of the corporate transaction to a holder of the number of shares of our common stock comprising such stock grant (to the extent such stock grant is no longer subject to any forfeiture or repurchase rights or our board of directors waives all forfeiture and repurchase rights upon the corporate transaction).

In taking any of the above actions with respect to stock rights, our board of directors will not be obligated to treat all stock rights, all stock rights held by a participant, or all stock rights of the same type, identically.

As of December 31, 2016, options to purchase 16,643,128 shares of common stock were outstanding under the 2009 Plan, at a weighted average exercise price of $0.62 per share, and 928,300 options to purchase shares of our common stock had been exercised.

Our board of directors may amend or terminate the 2009 Plan, except that any amendment that our board of directors determines is of a scope that requires shareholder approval will be subject to obtaining shareholder approval and any modification or amendment of the 2009 Plan that adversely affects a participant's rights will require such participant's consent.

No further awards will be made under our 2009 Plan on or after the effectiveness of the registration statement for this offering; however, awards outstanding under our 2009 Plan will continue to be governed by their existing terms.

2017 Stock Incentive Plan

We expect our board of directors to adopt and our stockholders to approve the 2017 Plan, which will become effective immediately prior to the effectiveness of the registration statement for this offering. The 2017 Plan provides for the grant of incentive stock options, non-qualified options, stock appreciation rights, restricted stock awards, restricted stock units and other stock-based awards. Upon effectiveness of the 2017 Plan, the number of shares of our common stock that will be reserved for issuance under the 2017 Plan will be the sum of: (1) ; plus (2) the number of shares (up to shares) equal to the sum of the number of shares of our common stock then available for issuance under the 2009 Plan and the number of shares of our common stock subject to outstanding awards under the 2009 Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right; plus (3) an annual increase, to be added on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2018 and continuing until, and including, the fiscal year ending December 31, 2028, equal to the lowest of shares of our common stock, % of the number of shares of our common stock outstanding on the first day of such fiscal year and an amount determined by our board of directors.

Our employees, officers, directors, consultants and advisors will be eligible to receive awards under the 2017 Plan. Incentive stock options, however, may only be granted to our employees.

Pursuant to the terms of the 2017 Plan, our board of directors (or a committee delegated by our board of directors) will administer the plan and, subject to any limitations in the plan, will select the recipients of awards and determine:

- the number of shares of our common stock covered by options and the dates upon which the options become exercisable;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and
- the number of shares of our common stock subject to and the terms of any stock appreciation rights, restricted stock awards, restricted stock units or other stock-based awards and the terms and conditions of such awards, including conditions for repurchase, issue price and repurchase price (though the measurement price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of such awards may not be in excess of ten years).

If our board of directors delegates authority to an executive officer to grant awards under the 2017 Plan, the executive officer will have the power to make awards to all of our employees, except executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards (which may include a formula by which the exercise price will be determined), and the maximum number of shares subject to awards that such executive officer may make.

Effect of certain changes in capitalization

Upon the occurrence of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, our board of directors shall equitably adjust:

- the number and class of securities available under the 2017 Plan;
- the share counting rules under the 2017 Plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and the measurement price of each outstanding stock appreciation right;
- the number of shares subject to, and the repurchase price per share subject to, each outstanding restricted stock award; and
- the share and per-share related provisions and the purchase price, if any, of each other stock-based award.

Effect of certain corporate transactions

Upon a merger or other reorganization event (as defined in our 2017 Plan), our board of directors may, on such terms as our board determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between the participant and us), take any one or more

of, or a combination of, the following actions pursuant to the 2017 Plan as to some or all outstanding awards, other than restricted stock awards:

- provide that all outstanding awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or successor corporation (or an affiliate thereof);

- upon written notice to a participant, provide that all of the participant's unvested awards will be forfeited, and/or vested but unexercised awards will terminate, immediately prior to the consummation of such reorganization event unless exercised by the participant (to the extent then exercisable) within a specified period following the date of the notice;

- provide that outstanding awards shall become exercisable, realizable or deliverable, or restrictions applicable to an award shall lapse, in whole or in part, prior to or upon such reorganization event;

- in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such award; and/or

- provide that, in connection with a liquidation or dissolution, awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings).

Our board of directors does not need to take the same action with respect to all awards, all awards held by a participant or all awards of the same type.

In the case of certain restricted stock units, no assumption or substitution is permitted, and the restricted stock units will instead be settled in accordance with the terms of the applicable restricted stock unit agreement.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, the repurchase and other rights with respect to outstanding restricted stock awards will continue for the benefit of the successor company and will, unless our board of directors may otherwise determine, apply to the cash, securities or other property into which shares of our common stock are converted or exchanged pursuant to the reorganization event. Upon the occurrence of a reorganization event involving a liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award or any other agreement between the participant and us.

At any time, our board of directors may, in its sole discretion, provide that any award under the 2017 Plan will become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part as the case may be.

No award may be granted under the 2017 Plan on or after the date that is ten years following the effectiveness of the registration statement related to this offering. Our board of directors may amend, suspend or terminate the 2017 Plan at any time, except that stockholder approval may be required to comply with applicable law or stock market requirements.

401(k) Plan

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Internal Revenue Code of 1986, as amended, so that contributions to our 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan. Our 401(k) plan provides that each participant may contribute up to 90% of his or her pre-tax compensation, up to a statutory limit, which is $18,000 for 2017. Participants who are at least 50 years old can also make "catch-up" contributions, which in 2016 may be up to an additional $5,500 above the statutory limit. As of January 2017, we also make discretionary matching contributions to our 401(k) plan equal to 50% of the employee contributions up to 2% of the employee's salary, subject to the statutorily prescribed limit, equal to $18,000 in 2017. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions and our discretionary match. Employee contributions are held and invested by the plan's trustee, subject to participants' ability to give investment directions by following certain procedures.

Limitation of Liability and Indemnification

Our certificate of incorporation, which will become effective upon the closing of this offering, limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law, or the DGCL, and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- 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;
- for voting for or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the DGCL.

In addition, our certificate of incorporation, which will become effective upon the closing of this offering, provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers specified liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with certain of our directors, and we intend to enter into indemnification agreements with all of our directors prior to the completion of this offering. These indemnification agreements may require us, among other things, to indemnify each such director for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors.

Some of our non-employee directors may, through their relationships with their employers, be insured or indemnified against specified liabilities incurred in their capacities as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, or the Securities Act, may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, 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 the director or officer. It also is possible that the director or officer could amend or terminate the plan when not in possession of material, nonpublic information. In addition, our directors and executive officers may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

Director Compensation

The table below shows all compensation to our non-employee directors during 2016.

Name	Fees earned or paid in cash ($)	All other compensation ($)	Total ($)
Kevin Bitterman	—	—	—
Gregory Grunberg	—	—	—
Robert Langer	—	60,000(1)	60,000
Robert Paull	—	—	—
Howard Rosen	40,000(2)	—	40,000
Rajeev Shah	—	—	—
Robert Tepper	—	—	—
Karen Wagner(3)	—	—	—
Chen Yu	—	—	—

(1) Dr. Langer received $60,000 in consulting fees in 2016 pursuant to a consulting agreement with us, which by its terms expires in November 2017.

(2) Mr. Rosen received a $40,000 board retainer fee in 2016.

(3) Ms. Wagner served as a member of our board of directors from April 2014 to April 2016.

Prior to this offering, we did not have a formal non-employee director compensation policy. We have historically reimbursed our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending board of director and committee meetings. Mr. Iwicki, one of our directors who also serves as our Chief Executive Officer, does not receive any additional compensation for his service as a director. The compensation that we pay to our Chief Executive Officer is discussed under "—Summary Compensation Table" and "—Narrative to Summary Compensation Table."

Following this offering, our non-employee directors will be compensated for their services on our board of directors as follows:

- each non-employee director will receive an option to purchase shares of our common stock upon his or her initial election or appointment to our board of directors;

- each non-employee director will receive an option to purchase shares of our common stock on the anniversary of his or her election to the board;
- each non-employee director will receive an annual fee of $; and
- each non-employee director who serves as chairman of a committee of our board of directors will receive additional compensation as follows:
  - chairman of the audit committee—an additional annual fee of $;
  - chairman of the compensation committee—an additional annual fee of $; and
  - chairman of the nominating and corporate governance committee—an additional annual fee of $.

Each member of our board of directors also will continue to be entitled to be reimbursed for reasonable travel and other expenses incurred in connection with attending meetings of our board of directors and any committee of our board of directors on which he or she serves.

TRANSACTIONS WITH RELATED PERSONS

Since January 1, 2014, we have engaged in the following transactions with our directors, executive officers and holders of more than 5% of our voting securities, and affiliates of our directors, executive officers and holders of more than 5% of our voting securities. We believe that all of these transactions were on terms as favorable as could have been obtained from unrelated third parties.

Series B Preferred Stock Financing

In April 2014, we issued and sold an aggregate of 15,624,999 shares of our Series B preferred stock at a price per share of $1.44 for an aggregate purchase price of $22.5 million, which included conversion the outstanding principal and interest on $5 million in convertible promissory notes issued to various 5% holders in December 2013, or the 2013 Notes. Additionally, upon closing of the Series B preferred stock financing, the warrants issued to holders of our 2013 Notes became exercisable into 694,444 shares of our Series B preferred stock. The following table sets forth the aggregate number of shares of our Series B preferred stock and warrants to purchase our Series B preferred stock that we issued and sold to our 5% stockholders and their affiliates in these transactions and the aggregate purchase price for such shares:

Purchaser(1)	Shares of Series B Preferred Stock	Series B Preferred Stock Warrants	Cash Purchase Price
Entities affiliated with Lux Capital(2)	2,300,703	173,611	$ 3,313,012
Entities affiliated with Polaris Ventures	2,265,764	173,611	$ 3,262,700
Third Rock Ventures	2,265,764	173,611	$ 3,262,700
CVF, LLC	916,961	173,611	$ 1,320,424
Ysios Capital	3,472,222	—	$ 5,000,000
AbbVie, Inc.(3)	3,819,444	—	$ 5,500,000

(1) See "Principal Stockholders" for additional information about shares held by these entities.

(2) In August 2015, Lux Capital distributed certain of its shares of Series B preferred stock and certain of its warrants to its limited partners.

(3) AbbVie, Inc. sold its shares of Series B preferred stock to funds affiliated with RA Capital in July 2015.

Series B-1 Preferred Stock Financing

In August 2015, we issued and sold 4,629,629 shares of our Series B-1 preferred stock to an entity affiliated with Wellington Management Company at a price per share of $1.512 for an aggregate cash purchase price of $7 million. See "Principal Stockholders" for additional information about the shares held by such entity.

Series C Preferred Stock Financing

In April 2016, we issued and sold an aggregate of 42,782,688 shares of our Series C preferred stock at a price per share of $1.5876 for an aggregate purchase price of $67.9 million. The following table sets forth the aggregate number of shares of our Series C preferred stock that we issued and sold

to our 5% stockholders and their affiliates in these transactions and the aggregate purchase price for such shares:

Purchaser(1)	Shares of Series C Preferred Stock	Cash Purchase Price
Longitude Venture Partners	10,707,985	$ 16,999,997
Orbimed Private Investments	10,707,985	$ 16,999,997
Entities affiliated with Vivo Capital	5,983,874	$ 9,499,998
Entities affiliated with Wellington Management Company	4,409,170	$ 6,999,998
Entities affiliated with RA Capital	4,409,170	$ 6,999,998
CVF, LLC	1,880,801	$ 2,985,960
Entities affiliated with Polaris Ventures	1,231,723	$ 1,955,483
Entities affiliated with Lux Capital	31,494	$ 50,000

(1) See "Principal Stockholders" for additional information about shares held by these entities.

Guillaume Pfefer Loan

We granted a loan of $150,000 to Guillaume Pfefer, a former executive in 2012, as part of his offer letter agreement. The term of the loan was five years, maturing on December 28, 2017, and the interest rate was equal to the minimum applicable federal rate in effect at the date of the loan. Under the terms of the agreement, and provided that Mr. Pfefer remained an employee, the initial aggregate principal amount of the loan plus any accrued but unpaid interest would be forgiven in varying amounts upon each annual anniversary such that the entire loan would be forgiven on the fourth year anniversary of the issuance of the loan. In addition, in the event that Mr. Pfefer's employment was terminated other than for cause or good reason as defined in the loan agreement, 100% of the unforgiven portion of the outstanding balance of the loan would be forgiven as of the date of such occurrence. In September 2014, Mr. Pfefer left us and the outstanding balance of the loan plus accrued interest was forgiven.

Registration Rights

We are a party to a registration rights agreement with the holders of our preferred stock, including our 5% stockholders and their affiliates and entities affiliated with some of our directors. This registration rights agreement provides these holders the right, subject to certain conditions, beginning 180 days following the completion of this offering, to demand that we file a registration statement or to request that their shares be covered by a registration statement that we are otherwise filing.

See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Indemnification Agreements

Our certificate of incorporation, which will become effective upon the closing of this offering, provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with certain of our directors, and we intend to enter into indemnification agreements with all of our directors prior to the completion of this offering.

Policies and Procedures for Related Person Transactions

Our board of directors intends to adopt written policies and procedures for the review of any transaction, arrangement or relationship in which our company is a participant, the amount involved exceeds $120,000 and one of our executive officers, directors, director nominees or 5% stockholders, or their immediate family members, each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our . The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the audit committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, the audit committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

Our audit committee may approve or ratify the transaction only if it determines that, under all of the circumstances, the transaction is in our best interests. Our audit committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our board of directors has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity, whether or not the person is also a director of the entity, that is a participant in the transaction where the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction and the amount involved in the transaction is

less than the greater of $200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction; and

- a transaction that is specifically contemplated by provisions of our certificate of incorporation or by-laws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by our compensation committee in the manner specified in the compensation committee's charter.

We did not have a written policy regarding the review and approval of related person transactions prior to this offering. Nevertheless, with respect to such transactions, it has been the practice of our board of directors to consider the nature of and business reasons for such transactions, how the terms of such transactions compared to those which might be obtained from unaffiliated third parties and whether such transactions were otherwise fair to and in the best interests of, or not contrary to, our best interests. In addition, all related person transactions required prior approval, or later ratification, by our board of directors.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of February 28, 2017 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock.

The column entitled "Percentage of shares beneficially owned—Before Offering" is based on a total of 90,017,257 shares of our common stock outstanding as of February 28, 2017, assuming the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 83,863,957 shares of our common stock upon the closing of this offering. The column entitled "Percentage of Shares Beneficially Owned—After Offering" is based on shares of our common stock to be outstanding after this offering, including the shares of our common stock that we are selling in this offering, but not including any additional shares issuable upon exercise of outstanding options or warrants. The table also assumes the automatic conversion of outstanding warrants to purchase shares of our preferred stock into warrants to purchase shares of our common stock.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options and warrants that are currently exercisable or exercisable within 60 days after February 28, 2017 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable.

Except as otherwise set forth below, the address of each beneficial owner is c/o Kala Pharmaceuticals, Inc., 100 Beaver Street, Suite 201, Waltham, MA 02453.

Name and Address of Beneficial Owner	Number of shares beneficially owned	Percentage of shares beneficially owned	
		Before Offering	After Offering
5% Stockholders:			
Longitude Venture Partners(1)	10,707,985	11.90%	
OrbiMed Private Investments(2)	10,707,985	11.90%	
Entities affiliated with Polaris Ventures(3)	9,848,470	10.92%	
Wellington Management Company(4)	9,038,799	10.04%	
Third Rock Ventures(5)	8,616,749	9.55%	
Entities affiliated with RA Capital(6)	8,228,614	9.14%	
Entities affiliated with Lux Capital(7)	6,359,809	7.06%	
Vivo Capital Fund(8)	5,983,874	6.65%	
CVF, LLC(9)	5,471,373	6.07%	
Directors and Named Executive Officers:			
Mark Iwicki(10)	3,243,122	3.48%	
Kim Brazzell(11)	503,261	*	
Hongming Chen, Sc.D.(12)	701,177	*	
Kevin Bitterman, Ph.D.(13)	9,848,470	10.92%	
Gregory Grunberg, M.D.(14)	10,707,985	11.90%	
Robert Langer, Sc.D.(15)	1,838,713	2.04%	
Robert Paull(16)	6,359,809	7.06%	
Howard Rosen(17)	199,386	*	
Rajeev Shah(18)	8,228,614	9.14%	
Robert Tepper, M.D.(19)	8,616,749	9.55%	
Chen Yu, M.D.(20)	5,983,874	6.65%	
All current executive officers and directors as a group (14 persons)(21)	56,839,817	59.41%	

* Less than one percent

(1) Consists of 10,707,985 shares of common stock issuable upon conversion of preferred stock held by Longitude Venture Partners II, L.P. ("LVP2"). Longitude Capital Partners II, LLC ("LCP2") is the general partner of LVP2 and may be deemed to share voting and investment power over the shares held by LVP2. Patrick G. Enright and Juliet Tammenoms Bakker are managing members of LCP2 and may be deemed to share voting and investment power over the shares held by LVP2. Gregory Grunberg, a member of our board of directors, is a member of LCP2 and may be deemed to share voting and investment power over the shares held by LVP2. Each of these individuals disclaims beneficial ownership of such shares except to the extent of his or her pecuniary interest therein. The address for LCP2 is 800 El Camino Real, Suite 220, Menlo Park, CA 94025.

(2) Consists of 10,707,985 shares of common stock issuable upon conversion of preferred stock held by OrbiMed Private Investments VI, LP ("OPI VI"). OrbiMed Advisors LLC ("OrbiMed Advisors") is the managing member of OrbiMed Capital GP VI LLC ("GP VI"), which is the general partner of OPI VI. Samuel D. Isaly is the managing member of and owner of a controlling interest in OrbiMed Advisors. By virtue of such relationships, GP VI, OrbiMed Advisors and Mr. Isaly may be deemed to have voting and investment power with respect to the shares held by OPI VI. Each of GP VI, OrbiMed Advisors and Mr. Isaly disclaims beneficial ownership of the shares held by

OPI VI, except to the extent of its or his pecuniary interest therein, if any. The address of OPI VI is 601 Lexington Avenue, 54th Floor, New York, New York 10022.

(3) Consists of (a) 9,335,610 shares of common stock issuable upon conversion of preferred stock and 167,523 shares of common stock issuable upon the exercise of warrants held by Polaris Venture Partners V, L.P., (b) 181,951 shares of common stock issuable upon conversion of preferred stock and 3,265 shares of common stock issuable upon the exercise of warrants held by Polaris Venture Partners Entrepreneurs' Fund V, L.P., (c) 63,0947 shares of common stock issuable upon conversion of preferred stock and 1,148 shares of common stock issuable upon the exercise of warrants held by Polaris Venture Partners Founders' Fund V, L.P. and (d) 93,351 shares of common stock issuable upon conversion of preferred stock and 1,675 shares of common stock issuable upon the exercise of warrants held by Polaris Venture Partners Special Founders' Fund V, L.P. Each of Polaris Venture Partners V, L.P., Polaris Venture Partners Special Founder's Fund V, L.P., Polaris Venture Partners Founders' Fund V, L.P. and Polaris Venture Partners Entrepreneurs' Fund V, L.P. (collectively, the "Polaris Funds") has the sole voting and investment power with respect to the shares directly held by it. Polaris Venture Management Co. V, L.L.C. ("PVM V") is the general partner of each the Polaris Funds. PVM V may be deemed to have sole power to vote and dispose of the shares held by the Polaris Funds. Each of Jonathan Flint and Terrance McGuire (collectively, the "Managing Members") are the managing members of PVM V and may be deemed to share voting and dispositive power with respect to the shares held by the Polaris Funds. Mr. Bitterman, a member of our board of directors, has an assignee interest in PVM V, and may be deemed to share voting and dispositive powers with respect to the shares held by the Polaris Funds by virtue of his relationship to PVM V. Each of PVM V, the Managing Members and Mr. Bitterman disclaim beneficial ownership of all of the shares owned by the Polaris Funds, except to the extent of their respective and proportionate pecuniary interests therein. The address of the Polaris Funds is One Marina Park Drive, 10th Floor, Boston, Massachusetts 02210.

(4) Consists of 9,038,799 shares of common stock issuable upon conversion of preferred stock held by Hadley Harbor Master Investors (Cayman) L.P. Wellington Management Company LLP is the investment adviser to this entity. Wellington Management Company LLP is an investment adviser registered under the Investment Advisers Act of 1940, as amended, and is an indirect subsidiary of Wellington Management Group LLP. Wellington Management Company LLP and Wellington Management Group LLP may each be deemed to share beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of the shares indicated in the table, all of which are held of record by Hadley Harbor Master Investors (Cayman) LLP or a nominee (Italianflare & Co.) on its behalf. The business address of the entity named in the table is c/o Wellington Management Company LLP, 280 Congress Street, Boston, Massachusetts, 02110. The business address of Wellington Management Company LLP and Wellington Management Group LLP is 280 Congress Street, Boston, MA 02110.

(5) Consists of 8,443,138 shares of common stock issuable upon conversion of preferred stock and 173,611 shares of common stock issuable upon the exercise of warrants held by Third Rock Ventures, L.P. ("TRV LP"). Each of Third Rock Ventures GP, L.P., ("TRV GP LP"), the general partner of TRV LP, and Third Rock Ventures GP, LLC ("TRV GP LLC"), the general partner of TRV GP LP, and Mark Levin, Kevin Starr and Robert Tepper, the managers of TRV GP LLC, may be deemed to share voting and investment power with respect to all shares held by TRV LP. Dr. Tepper, a member of our board of directors, disclaims beneficial ownership of all shares held by TRV LP, except to the extent of his pecuniary interest therein. The address for TRV LP is 29 Newbury Street, Boston, MA 02116.

(6) Consists of (a) 6,771,090 shares of common stock issuable upon conversion of preferred stock held by RA Capital Healthcare Fund, L.P. ("RA Capital") and (b) 1,457,524 shares of common stock issuable upon conversion of preferred stock held by Blackwell Partners LLC—Series A

("Blackwell"). RA Capital Management, LLC ("RA Capital Management") is the general partner of RA Capital and the investment advisor to Blackwell. Investment decisions with respect to the shares held by RA Capital and Blackwell were made by a portfolio management team at RA Capital Management of which Rajeev Shah, a member of our board of directors, is a member. Mr. Shah disclaims beneficial ownership of all shares held by RA Capital and Blackwell, except to the extent of his pecuniary interest therein. The address for each of RA Capital, Blackwell and RA Capital Management is 20 Park Plaza, Suite 1200, Boston, MA 02116.

(7) Consists of (a) 6,023,093 shares of common stock issuable upon conversion of preferred stock and 80,744 shares of common stock issuable upon the exercise of warrants held by Lux Ventures II, LP ("Lux II") and (b) 252,586 shares of common stock issuable upon conversion of preferred stock and 3,386 shares of common stock issuable upon the exercise of warrants held by Lux Ventures II Sidecar, L.P. ("Lux II Sidecar"). Lux Venture Partners II, L.P. ("Lux Venture Partners") is the general partner of Lux II and Lux II Sidecar. Lux Venture Associates II, LLC ("Lux Associates") is the general partner of Lux Venture Partners and Lux Capital Management, LLC ("Lux Management") is the sole member of Lux Venture Partners. Lux Management, as sole member, may be deemed to share voting and investment powers for the shares held by Lux II and Lux II Sidecar. Joshua Wolfe and Peter Hebert are the individual managers of Lux Management (the "Individual Managers"). Robert Paull, a member of our board of directors, is a venture partner at Lux Capital Management. Lux Venture Partners, Lux Associates and Lux Management disclaim beneficial ownership of such shares, except to the extent of their pecuniary interest therein. Each of the Individual Managers and Mr. Paull disclaim beneficial ownership over the shares reported herein, and in all events disclaim beneficial ownership except to the extent of his pecuniary interest therein. The mailing address of the beneficial owner is 295 Madison Avenue, 24th Floor, New York, NY 10017.

(8) Consists of (a) 5,257,831 shares of common stock issuable upon conversion of preferred stock held by Vivo Capital Fund VIII, L.P. ("Vivo Capital Fund") and (b) 726,043 shares of common stock issuable upon conversion of preferred stock held by Vivo Capital Surplus Fund VIII, L.P. ("Vivo Capital Surplus"). Vivo Capital VIII, LLC, the sole general partner of both Vivo Capital Fund and Vivo Capital Surplus, has shared voting power and shared investment power over such securities, may be deemed to beneficially own such shares, and disclaims beneficial ownership of the shares except to the extent of its pecuniary interests therein. Chen Yu, M.D. a managing member of Vivo Capital VIII, LLC and a member of our board of directors, disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein. The mailing address of Vivio Capital Fund is 505 Hamilton Avenue, Suite 207, Palo Alto, CA 94301. The mailing address of Vivio Capital Surplus is 505 Hamilton Avenue, Suite 207, Palo Alto, CA 94301.

(9) Consists of 5,297,762 shares of common stock issuable upon conversion of preferred stock and 173,611 shares of common stock issuable upon the exercise of warrants held by CVF, LLC. Richard H. Robb, manager of CVF, LLC, exercises voting and investment power with respect to shares held by CVF, LLC. Mr. Robb disclaims beneficial ownership of all shares held by CVF, LLC except to the extent of his pecuniary interest therein. The mailing address of the beneficial owner is 222 N. LaSalle Street, Suite 2000, Chicago, IL 60601.

(10) Consists of shares of common stock underlying options held by Mr. Iwicki that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

(11) Consists of shares of common stock underlying options held by Dr. Brazzell that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

(12) Consists of (a) 154,000 shares of common stock owned by Dr. Chen and (b) 547,177 shares of common stock underlying options held by Dr. Chen that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

(13) Consists of the shares described in note 3 above.

(14) Consists of the shares described in note 1 above.

(15) Consists of (a) 1,700,000 shares of common stock owned by Dr. Langer and (b) 138,713 shares of common stock underlying options held by Dr. Langer that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

(16) Consists of the shares described in note 7 above.

(17) Consists of (a) 16,875 shares of common stock owned by Mr. Rosen and (b) 182,511 shares of common stock underlying options held by Mr. Rosen that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

(18) Consists of the shares described in note 6 above.

(19) Consists of the shares described in note 5 above.

(20) Consists of the shares described in note 8 above.

(21) Includes (a) 5,223,441 shares of common stock underlying options that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date and (b) 431,352 shares of common stock issuable upon the exercise of warrants that are exercisable as of February 28, 2017 or will become exercisable within 60 days after such date.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to the certificate of incorporation and the bylaws that will be in effect upon the closing of this offering. We will file copies of these documents with the SEC as exhibits to our registration statement of which this prospectus forms a part. The description of the capital stock reflects changes to our capital structure that will occur upon the closing of this offering.

Upon the closing of this offering, our authorized capital stock will consist of shares of our common stock, par value $0.001 per share, and shares of our preferred stock, par value $0.001 per share, all of which preferred stock will be undesignated.

As of February 28, 2017, we had issued and outstanding:

- 6,153,300 shares of our common stock held by 18 stockholders of record;
- 11,243,209 shares of our Series Seed preferred stock held by 11 stockholders of record that are convertible into 11,243,209 shares of our common stock;
- 9,583,432 shares of our Series A preferred stock held by 10 stockholders of record that are convertible into 9,583,432 shares of our common stock;
- 15,624,999 shares of our Series B preferred stock held by 21 stockholders of record that are convertible into 15,624,999 shares of our common stock; and
- 4,629,629 shares of our Series B-1 preferred stock held by 1 stockholder of record that are convertible into 4,629,629 shares of our common stock; and
- 42,782,688 shares of our Series C preferred stock held by 25 stockholders of record that are convertible into 42,782,688 shares of our common stock.

Upon the closing of this offering, all of the outstanding shares of our preferred stock will automatically convert into an aggregate of 83,863,957 shares of our common stock.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Each election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of our common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any of our outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our certificate of incorporation that will become effective upon the closing of this offering, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights,

preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Warrants

As of February 28, 2017, we had outstanding:

- warrants to purchase up to an aggregate of 80,000 shares of our Series Seed preferred stock, at an exercise price of $1.00 per share, which we refer to as the Series Seed warrants;
- warrants to purchase up to an aggregate of 972,222 shares of our Series B preferred stock, at an exercise price of $1.44 per share, which we refer to as the Series B warrants; and
- warrants to purchase up to an aggregate of 251,951 shares of our Series C preferred stock, at an exercise price of $1.59 per share, which we refer to as the Series C warrants, which warrants were not exercisable into shares as of February 28, 2017, as we had not borrowed the remaining $10.0 million under our 2014 Debt Facility.

Upon the closing of this offering:

- the Series Seed warrants will become exercisable for an aggregate of 80,000 shares of our common stock, at an exercise price of $1.00 per share;
- the Series B warrants will become exercisable for an aggregate of 972,222 shares of our common stock, at an exercise price of $1.44 per share;
- the Series C warrants will become exercisable for an aggregate of 251,951 shares of our common stock, at an exercise price of $1.59 per share, upon our draw down of the remaining $10.0 million under 2014 Debt Facility.

These warrants provide for adjustments in the event of specified mergers, reorganizations, reclassifications, stock dividends, stock splits or other changes in our corporate structure.

Options

As of February 28, 2017, options to purchase an aggregate of 16,643,128 shares of our common stock, at a weighted average exercise price of $0.62 per share, were outstanding.

Delaware Anti-Takeover Law and Certain Charter and Bylaw Provisions

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a "business combination" with any "interested stockholder" for three years following the date that the person became an interested stockholder, unless either the interested stockholder attained such status with the approval of our board of directors, the business combination is approved by our board of directors and stockholders in a prescribed manner or the interested stockholder acquired at least 85% of our outstanding voting stock in the transaction in which it became an interested stockholder. A "business

combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder" and the sale of more than 10% of our assets. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person. The restrictions contained in Section 203 are not applicable to any of our existing stockholders that will own 15% or more of our outstanding voting stock upon the closing of this offering.

Staggered Board; Removal of Directors

Our certificate of incorporation and our bylaws divide our board of directors into three classes with staggered three-year terms. In addition, our certificate of incorporation and our bylaws provide that directors may be removed only for cause and only by the affirmative vote of the holders of 75% of our shares of capital stock present in person or by proxy and entitled to vote. Under our certificate of incorporation and bylaws, any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Furthermore, our certificate of incorporation provides that the authorized number of directors may be changed only by the resolution of our board of directors. The classification of our board of directors and the limitations on the ability of our stockholders to remove directors, change the authorized number of directors and fill vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Stockholder Action; Special Meeting of Stockholders; Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our certificate of incorporation and our bylaws provide that any action required or permitted to be taken by our stockholders at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before such meeting and may not be taken by written action in lieu of a meeting. Our certificate of incorporation and our bylaws also provide that, except as otherwise required by law, special meetings of the stockholders can only be called by the chairman of our board of directors, our chief executive officer or our board of directors. In addition, our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors, or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities. These provisions also could discourage a third party from making a tender offer for our common stock because even if the third party acquired a majority of our outstanding voting stock, it would be able to take action as a stockholder, such as electing new directors or approving a merger, only at a duly called stockholders meeting and not by written consent.

Super-Majority Voting

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our bylaws may be amended or repealed by a majority vote of our board of directors or the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in

any election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation described above.

Registration Rights

We have entered into a third amended and restated registration rights agreement dated April 6, 2016, or the registration rights agreement, with holders of our preferred stock. Beginning 180 days following the closing of this offering, holders of a total of 83,863,957 shares of our common stock, holders of an additional 1,304,173 shares of our common stock issuable upon the exercise of warrants and Mr. Iwicki, who holds 6,568,460 shares of our common stock issuable upon the exercise of stock options, will have the right to require us to register these shares under the Securities Act under specified circumstances. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. If not otherwise exercised, the rights under the registration rights agreement described below will expire seven years after the closing of this offering.

Demand and Form S-3 Registration Rights

Beginning 180 days after this offering, subject to specified limitations set forth in the registration rights agreement, at any time, the holders of at least 50% of the then outstanding shares having rights under the registration rights agreement (excluding shares held by our chief executive officer), or the registrable securities, may demand that we register registrable securities then outstanding under the Securities Act for purposes of a public offering having an aggregate offering price to the public of not less than $10.0 million. We are not obligated to file a registration statement pursuant to this provision on more than two occasions.

In addition, subject to specified limitations set forth in the registration rights agreement, at any time after we become eligible to file a registration statement on Form S-3, holders of the registrable securities then outstanding may request that we register their registrable securities on Form S-3 for purposes of a public offering for which the reasonably anticipated aggregate offering price to the public would exceed $1.0 million. We are not obligated to file a registration statement pursuant to this provision on more than two occasions in any 12-month period.

Incidental Registration Rights

If, at any time after the closing of this offering, we propose to register for our own account any of our securities under the Securities Act, the holders of registrable securities will be entitled to notice of the registration and, subject to specified exceptions, have the right to require us to use our reasonable best efforts to register all or a portion of the registrable securities then held by them in that registration.

In the event that any registration in which the holders of registrable securities participate pursuant to our registration rights agreement is an underwritten public offering, we have agreed to enter into an underwriting agreement in usual and customary form and use our reasonable best efforts to facilitate such offering.

Expenses

Pursuant to the registration rights agreement, we are required to pay all registration expenses, including all registration and filing fees, exchange listing fees, printing expenses, fees and expenses of one counsel selected by the selling stockholders to represent the selling stockholders, state Blue Sky fees and expenses, and the expense of any special audits incident to or required by any such registration, but excluding underwriting discounts, selling commissions and the fees and expenses of the selling stockholders' own counsel (other than the counsel selected to represent all selling stockholders). We are not required to pay registration expenses if the registration request under the registration rights

agreement is withdrawn at the request of holders of at least 50% of the registrable securities, unless the withdrawal is related to information concerning the business or financial condition of us learned by the selling stockholders after the initiation of such registration request.

The registration rights agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us or any violation or alleged violation whether by action or inaction by us under the Securities Act, the Exchange Act, any state securities or Blue Sky law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities or Blue Sky law in connection with such registration statement or the qualification or compliance of the offering, and they are obligated to indemnify us for material misstatements or omissions in the registration statement attributable to them.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company, LLC.

NASDAQ Global Market

We intend to apply to have our common stock listed on The NASDAQ Global Market under the symbol "KALA."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options, or the anticipation of these sales, could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through sales of equity securities.

Upon the closing of this offering, we will have outstanding shares of our common stock, after giving effect to the issuance of shares of our common stock in this offering, assuming no exercise by the underwriters of their option to purchase additional shares of our common stock.

Of the shares to be outstanding immediately after the closing of this offering, we expect that the shares to be sold in this offering will be freely tradable without restriction under the Securities Act unless purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining shares of our common stock will be "restricted securities" under Rule 144, and we expect that substantially all of these restricted securities will be subject to the 180-day lock-up period under the lock-up agreements as described below. These restricted securities may be sold in the public market upon release or waiver of any applicable lock-up agreements and only if registered or pursuant to an exemption from registration, such as Rule 144 or 701 under the Securities Act.

Rule 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, any person who is not our affiliate and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell those shares without restriction, subject to the availability of current public information about us. In addition, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available.

Beginning 90 days after the date of this prospectus, a person who is our affiliate or who was our affiliate at any time during the preceding three months and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; and
- the average weekly trading volume in our common stock on The NASDAQ Global Market during the four calendar weeks preceding the date of filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

Sales 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.

Upon waiver or expiration of the 180-day lock-up period described below, approximately shares of our common stock will be eligible for sale under Rule 144. We cannot estimate the number of shares of our common stock that our existing stockholders will elect to sell under Rule 144.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us in connection with a qualified compensatory stock plan or other written agreement is eligible to resell these shares 90 days after the date of this prospectus in reliance on Rule 144, but without compliance with the various restrictions, including the availability of public information about us, holding period and volume limitations, contained in Rule 144. Subject to the 180-day lock-up period described below, approximately shares of our common stock, based on shares outstanding as of , 2017 will be eligible for sale in accordance with Rule 701.

Lock-up Agreements

We, our directors and executive officers and substantially all of our stockholders have agreed that, without the prior written consent of J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, whether any such transaction is to be settled by delivery of shares of our common stock or such other securities, in cash or otherwise;

- enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock or any securities convertible into or exchangeable or exercisable for share of our common stock, whether any such transaction is to be settled by delivery of shares of our common stock or such other securities, in cash or otherwise; or

- in our case, file a registration statement relating to any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, or in the case of our directors, executive officers and stockholders, make any demand for, or exercise any right with respect to, the registration of any shares of our common stock or any securities convertible into or exchangeable or exercisable for shares of our common stock.

These agreements are subject to certain exceptions, as described in the section of this prospectus entitled "Underwriting."

Registration Rights

Beginning 180 days after the closing of this offering, the holders of an aggregate of 83,863,957 shares of our common stock, along with holders of an additional 7,872,633 shares of our common stock issuable upon the exercise of warrants and options, will have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. See "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Stock Options and Form S-8 Registration Statement

As of December 31, 2016, we had outstanding options to purchase an aggregate of 16,643,128 shares of our common stock, of which options to purchase 5,395,653 shares were vested. Following this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all

of the shares of our common stock subject to outstanding options and reserved for future options and other awards under our 2009 Plan and our 2017 Plan. See "Executive Compensation—Stock Option and Other Compensation Plans" for additional information regarding these plans. Accordingly, shares of our common stock registered under the registration statements will be available for sale in the open market, subject to Rule 144 volume limitations applicable to affiliates, and subject to any vesting restrictions and lock-up agreements applicable to these shares.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a discussion of material U.S. federal income and estate tax considerations relating to ownership and disposition of shares of our common stock acquired in this offering by a non-U.S. holder. For purposes of this discussion, the term "non-U.S. holder" means a beneficial owner (other than a partnership or other pass-through entity) of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation, created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons who hold their common stock through partnerships or such other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, or the IRS, will not challenge one or more of the tax consequences described in this prospectus.

We assume in this discussion that each non-U.S. holder holds shares of our common stock as a capital asset (generally, property held for investment) for U.S. federal income tax purposes. This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- financial institutions;
- brokers or dealers in securities;
- tax-exempt organizations;
- pension plans;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment or who have elected to mark securities to market;

- insurance companies;
- controlled foreign corporations;
- passive foreign investment companies;
- non-U.S. governments; and
- certain U.S. expatriates.

THIS DISCUSSION IS FOR INFORMATION ONLY AND IS NOT, AND IS NOT INTENDED TO BE, LEGAL OR TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE U.S. FEDERAL, STATE, LOCAL, ESTATE AND NON-U.S. INCOME AND OTHER TAX CONSIDERATIONS OF ACQUIRING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGES IN APPLICABLE LAWS.

Distributions

As discussed under the heading "Dividend Policy" above, we do not expect to make cash dividends to holders of our common stock in the foreseeable future. If we make distributions in respect of our common stock, those distributions generally 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, subject to the tax treatment described in this section. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to the non-U.S. holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock." Any such distributions will also be subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "FATCA" below.

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements (generally including provision of a properly executed IRS Form W-8ECI (or applicable successor form) certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States). However, such U.S. effectively connected income, net of specified deductions and credits, is taxed in the hands of the non-U.S. holder at the same graduated U.S. federal income tax rates as would apply if such holder were a U.S. person (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is classified as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors

regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock

Subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "FATCA," a non-U.S. holder generally will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such non-U.S. holder's sale, exchange or other disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to U.S. persons, and, if the non-U.S. holder is a foreign corporation, an additional branch profits tax at a rate of 30% (or a lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) may also apply;

- the non-U.S. holder is a non-resident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S.-source capital losses of the non-U.S. holder recognized in the taxable year of the disposition, if any; or

- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation" unless our common stock is regularly traded on an established securities market and the non-U.S. holder held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a "U.S. real property holding corporation" if the fair market value of its "United States real property interests" (as defined in the Code and applicable regulations) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes. If we are determined to be a U.S. real property holding corporation and our common stock is not regularly traded on an established securities market, then (i) a purchaser of shares of our common stock from a non-U.S. holder generally will withhold 15% of the proceeds payable to such non-U.S. holder and (ii) the non-U.S. holder's net gain derived from the disposition of shares of our common stock generally will be taxed in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. The tax treatment described in (ii) of the preceding sentence will also generally apply to the non-U.S. holder's net gain derived from the disposition of shares of our common stock even if our common stock is regularly traded on an established securities market if such holder beneficially owns more than 5% of our outstanding common stock, during the applicable testing period.

U.S. Federal Estate Tax

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death are considered U.S.-situs assets and will be included in the individual's gross estate for U.S. federal estate tax purposes. Such shares, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders generally will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable IRS Form W-8), or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under the heading "Distributions," will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or non-U.S., unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

FATCA

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, generally impose a 30% withholding tax on dividends on, and gross proceeds from the sale or disposition of, our common stock if paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain of its U.S. investors, or (iii) the foreign entity is otherwise exempt under FATCA.

Withholding under FATCA generally (1) applies to payments of dividends on our common stock, and (2) will apply to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2018. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of the tax. Non-U.S. holders

should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

The preceding discussion of material U.S. federal tax considerations is for information only. It is not, and is not intended to be, legal or tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local, estate and non-U.S. income and other tax consequences of acquiring, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.

UNDERWRITING

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Name	Number of Shares
J.P. Morgan Securities LLC	
Merrill Lynch, Pierce, Fenner & Smith Incorporated	
Wells Fargo Securities, LLC.	
Wedbush Securities Inc.	
Total	

The underwriters are committed to purchase all the common shares offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common shares directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of $ per share. Any such dealers may resell shares to certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. After the initial public offering of the shares, the offering price and other selling terms may be changed by the underwriters. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased pursuant to the underwriters' option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without option exercise	With full option exercise
Per Share	$	$
Total	$	$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately $. We have agreed to reimburse the underwriters up to

$ for expenses related to any filing with, and any clearance of this offering by, the Financial Industry Regulatory Authority, Inc.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We and our directors, executive officers and substantially all of our stockholders have agreed not to (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers, managers and members in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities, whether any such transaction described in clause (1) or (2) is to be settled by delivery of common stock or such other securities, in cash or otherwise, or (3) in our case, file a registration statement relating to any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock, or in the case of our directors, executive officers and stockholders, make any demand for or exercise any right with respect to, the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock, in each case without the prior written consent of J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated for a period of 180 days after the date of this prospectus.

The restrictions described in the immediately preceding paragraph do not apply to certain transactions, including:

- the sale of shares to the underwriters in this offering;
- subject to certain limitations, transfers of such securities by any person other than us (A) as a *bona fide* gift or gifts, (B) to any trust for the direct or indirect benefit of such person or one or more of their immediate family members not involving a disposition for value, (C) by will, other testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of such person, (D) that occur by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement, (E) to partners, members or stockholders of such person, (F) to any corporation, partnership, limited liability company, investment fund or other entity controlled or managed by, or under common control or management with, such person or their in a transaction not involving a disposition for value, (G) prior to the first public filing of a prospectus for this offering, and (H) in connection with the conversion of our outstanding preferred stock into shares of our common stock in connection with the consummation of this offering (which shares shall be subject to these restrictions on transfer);
- subject to certain limitations, the exercise of, and the issuance of any shares of our common stock upon the exercise of, options granted under out stock-based compensation plans or warrants described herein, provided that each recipient of such security shall execute a lock-up agreement substantially on the terms described herein if such recipient has not already delivered one;

- the issuance by us of any options and other awards granted under our stock-based compensation plans described herein, provided that each recipient of such grant shall execute a lock-up agreement substantially on the terms described herein if such recipient has not already delivered one;
- the filing by us of any registration statement on Form S-8 relating to shares of our common stock granted, or reserved for issuance, under our stock-based compensation plans described herein;
- transfers by any person other than us pursuant to any pre-existing contractual arrangement that provides for the repurchase of such securities by us;
- transfers by any person other than us pursuant to the terms of any stock incentive plan or stock purchase plan of ours solely to satisfy tax withholding obligations;
- transfers by any person other than us in connection with the termination of employment with the company;
- subject to certain limitations, the establishment by any person other than us of a trading plan pursuant to Rule 10b5-1 under the Exchange Act;
- subject to certain limitations, transfers of securities acquired in this offering or acquired on the open market following this offering;
- transfer shares by any person other than us of such securities pursuant to a *bona fide* third-party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock involving a change of control of ownership of the company; and
- the issuance by us of shares of our common stock or other securities issued in connection with a transaction with an unaffiliated third party that includes a *bona fide* commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or intellectual property license agreements) or any acquisition of assets or acquisition of not less than a majority or controlling portion of the equity of another entity, provided that (x) the aggregate number of shares issued pursuant to this bullet point will not exceed 5% of the total number of outstanding shares of our common stock immediately following the issuance and sale of the shares in this offering and (y) the recipient of any such shares and securities issued pursuant to this bullet point during the 180-day restricted period described above shall enter into a lock-up agreement substantially on the terms described herein.

J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated, in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. In addition, in the event that J.P. Morgan Securities LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated grant an early release to certain beneficial holders of any common stock or other securities subject to the lock up agreements with respect to shares of common stock that, in the aggregate, exceed a specified percentage of our then outstanding common stock, then certain other lock up parties shall also be granted an early release, on the same terms, from their obligations on a pro rata basis, subject to certain exceptions.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We intend to apply to have our common stock approved for listing on The NASDAQ Global Market under the symbol "KALA."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the

purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of the common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. 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 common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on The NASDAQ Global Market, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common shares, or that the shares will trade in the public market at or above the initial public offering price.

Other Relationships

The underwriters and their respective 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. Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. The underwriters and their respective affiliates may also make investment recommendations 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 or short positions in our debt or equity securities or loans.

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to Prospective Investors in the 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, with effect from and including the date on which the European Union Prospectus Directive, or the EU Prospectus Directive, was implemented in that Relevant Member State, or the Relevant Implementation Date, no offer of securities may be made to the public in that Relevant Member State other than:

1. to any legal entity which is a qualified investor as defined under the EU Prospectus Directive;

2. to fewer than 150 natural or legal persons (other than qualified investors as defined in the EU Prospectus Directive), subject to obtaining the prior consent of the representatives; or

3. in any other circumstances falling within Article 3(2) of the EU Prospectus Directive;

provided that no such offer of securities shall require the Company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive and each person who initially acquires any securities or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and the Company that it is a "qualified investor" within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive.

In the case of any securities being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the securities acquired by it in the offer have not been

acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any securities to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer of securities to the public" in relation to any securities 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 securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Member State by any measure implementing the EU Prospectus Directive in that Member State. The expression "EU Prospectus Directive" means Directive 2003/71/EC (and any amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Notice to Prospective Investors in the United Kingdom

In the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments 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) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the securities in the United Kingdom.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for, issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority, or DFSA. This prospectus is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

In relation to its use in the Dubai International Financial Centre, or DIFC, this prospectus is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the shares may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to Prospective Investors in Australia

This prospectus:

- does not constitute a product disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth), or the Corporations Act;
- has not been, and will not be, lodged with the Australian Securities and Investments Commission, or ASIC, as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document under Chapter 6D.2 of the Corporations Act;
- does not constitute or involve a recommendation to acquire, an offer or invitation for issue or sale, an offer or invitation to arrange the issue or sale, or an issue or sale, of interests to a "retail client" (as defined in section 761G of the Corporations Act and applicable regulations) in Australia; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, or Exempt Investors, available under section 708 of the Corporations Act.

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those securities to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to 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 Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Non-CIS Securities may not be circulated or distributed, nor may the Non-CIS Securities 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 Non-CIS Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (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 Non-CIS Securities pursuant to an offer made under Section 275 of the SFA except:

(a) 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;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the shares of common stock offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. Davis Polk & Wardwell LLP, New York, New York is acting as counsel for the underwriters in connection with this offering.

EXPERTS

The financial statements as of December 31, 2015 and 2016, and for the years then ended, included in this prospectus have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

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 we are offering to sell. This prospectus, which constitutes part of the registration statement, does not include all of the information contained in the registration statement and the exhibits, schedules and amendments to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and to the exhibits and schedules to the registration statement. Statements contained in this prospectus about the contents of any contract, agreement or other document are not necessarily complete, and, in each instance, we refer you to the copy of the contract, agreement or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You may read and copy the registration statement of which this prospectus is a part at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. You can request copies of the registration statement by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. In addition, the SEC maintains an Internet website, which is located at *http://www.sec.gov*, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's Internet website. Upon completion of this offering, we will be subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended and we will file reports, proxy statements and other information with the SEC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Kala Pharmaceuticals, Inc.
Waltham, Massachusetts

We have audited the accompanying balance sheets of Kala Pharmaceuticals, Inc. (the "Company") as of December 31, 2015 and 2016, and the related statements of operations, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States) 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Kala Pharmaceuticals, Inc. as of December 31, 2015 and 2016, and the results of its operations and its cash flows for each of the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 30, 2017

KALA PHARMACEUTICALS, INC.

BALANCE SHEETS

(In thousands, except share and per share amounts)

	December 31,		Pro Forma December 31,
	2015	2016	2016
			(unaudited)
Assets			
Current assets:			
Cash	$ 5,759	$ 45,472	$ 45,472
Prepaid expenses and other current assets	1,842	154	154
Total current assets	7,601	45,626	45,626
Property and equipment, net	738	594	594
Restricted cash	109	109	109
Total assets	$ 8,448	$ 46,329	$ 46,329
Liabilities, Convertible Preferred Stock and Stockholders' (Deficit) Equity			
Current liabilities:			
Current portion of long-term debt	$ 2,000	$ 556	$ 556
Accounts payable	1,404	997	997
Accrued expenses	2,103	3,993	3,993
Total current liabilities	5,507	5,546	5,546
Long-term liabilities:			
Long-term debt—less current portion	7,795	9,098	9,098
Warrant liability	936	1,039	—
Other long-term liabilities	3	17	17
Total long-term liabilities	8,734	10,154	9,115
Total liabilities	14,241	15,700	14,661
Commitments (Note 14)			
Convertible preferred stock, 84,266,982 shares authorized as of December 31, 2015 and 170,336,260 shares authorized as of December 31, 2016			
Series Seed convertible preferred stock, $0.001 par value—11,323,209 shares designated as of December 2015 and 2016; 11,243,209 shares issued and outstanding as of December 31, 2015 and 2016, liquidation value of $11,243 at December 31, 2015 and 2016, no shares issued or outstanding, pro forma as of December 31, 2016 (unaudited)	11,065	11,065	—
Series A convertible preferred stock, $0.001 par value—9,583,432 shares designated as of December 31, 2015 and 2016; 9,583,432 shares issued and outstanding as of December 31, 2015 and 2016, liquidation value of $11,500 as of December 31, 2015 and 2016, no shares issued or outstanding, pro forma as of December 31, 2016 (unaudited)	10,736	10,736	—
Series B convertible preferred stock, $0.001 par value—16,597,221 shares designated as of December 31, 2015 and 2016; 15,624,999 shares issued and outstanding as of December 31, 2015 and 2016; liquidation value of $22,500 as of December 31, 2015 and 2016; no shares issued or outstanding, pro forma as of December 31, 2016 (unaudited)	22,185	22,185	—
Series B-1 convertible preferred stock, $0.001 par value—4,629,629 shares designated as of December 31, 2015 and 2016; 4,629,629 shares issued and outstanding as of December 31, 2015 and 2016, liquidation value of $7,000 as of December 31, 2015 and 2016; no shares issued or outstanding, pro forma as of December 31, 2016 (unaudited)	6,885	6,885	—
Series C convertible preferred stock, $0.001 par value—0 and 43,034,639 shares designated as of December 31, 2015 and 2016, 0 and 42,782,688 shares issued and outstanding as of December 31, 2015 and 2016, respectively, liquidation value of $0 and $67,922 as of December 31, 2015 and 2016, respectively, no shares issued or outstanding, pro forma as of December 31, 2016 (unaudited)	—	67,520	—
Stockholders' deficit:			
Common stock, $0.001 par value—57,000,000, and 110,251,951 shares authorized as of December 31, 2015 and 2016, respectively; 6,153,300 shares issued and outstanding as of December 31, 2015 and 2016, 90,017,257 shares issued and outstanding, pro forma as of December 31, 2016 (unaudited)	6	6	90
Additional paid-in capital	2,300	4,369	123,715
Accumulated deficit	(58,970)	(92,137)	(92,137)
Total stockholders' (deficit) equity	(56,664)	(87,762)	31,668
Total liabilities, convertible preferred stock and stockholders' (deficit) equity	$ 8,448	$ 46,329	$ 46,329

The accompanying notes are an integral part of these financial statements.

KALA PHARMACEUTICALS, INC.

STATEMENTS OF OPERATIONS

(In thousands, except share and per share amounts)

	Year Ended December 31,	
	2015	2016
Revenue	$ 45	$ —
Operating expenses:		
Research and development	11,382	25,029
General and administrative	4,609	7,640
Total operating expenses	15,991	32,669
Loss from operations	(15,946)	(32,669)
Other income (expense):		
Interest income	—	147
Interest expense	(604)	(767)
Change in fair value of warrant liability	(132)	122
Total other income (expense)	(736)	(498)
Net loss attributable to common stockholders—basic and diluted	$ (16,682)	$ (33,167)
Net loss per share attributable to common stockholders—basic and diluted	$ (2.86)	$ (5.39)
Weighted average shares outstanding—basic and diluted	5,834,766	6,153,300
Pro forma net loss per share attributable to common stockholders—basic and diluted (unaudited)		$ (0.42)
Pro forma weighted average shares outstanding—basic and diluted (unaudited)		78,678,676

The accompanying notes are an integral part of these financial statements.

KALA PHARMACEUTICALS, INC.

STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

(In thousands, except share amounts)

	Convertible Preferred Stock $0.001 Par Value Seed		Convertible Preferred Stock $0.001 Par Value Series A		Convertible Preferred Stock $0.001 Par Value Series B		Convertible Preferred Stock $0.001 Par Value Series B-1		Convertible Preferred Stock $0.001 Par Value Series C		Common Stock $0.001 Par Value		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances at January 1, 2015	11,243,209	$ 11,065	9,583,432	$ 10,736	15,624,999	$ 22,185	—	$ —	—	$ —	5,268,875	$ 5	$ 1,559	$ (42,288)	$ (40,724)
Issuance of Series B-1 preferred stock-net of issuance costs of $115	—	—	—	—	—	—	4,629,629	6,885			—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	638	—	638
Exercise of stock options	—	—	—	—	—	—	—	—	—	—	884,425	1	103	—	104
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	(16,682)	(16,682)
Balances at December 31, 2015	11,243,209	11,065	9,583,432	10,736	15,624,999	22,185	4,629,629	6,885	—	—	6,153,300	6	2,300	(58,970)	(56,664)
Issuance of Series C preferred stock-net of issuance costs of $402	—	—	—	—	—	—	—	—	42,782,688	67,520	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	2,069	—	2,069
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	(33,167)	(33,167)
Balances at December 31, 2016	11,243,209	$ 11,065	9,583,432	$ 10,736	15,624,999	$ 22,185	4,629,629	$ 6,885	42,782,688	$ 67,520	6,153,300	$ 6	$ 4,369	$ (92,137)	$ (87,762)

The accompanying notes are an integral part of these financial statements.

KALA PHARMACEUTICALS, INC.

STATEMENTS OF CASH FLOWS

(In thousands)

	Year Ended December 31,	
	2015	2016
Cash flows from operating activities:		
Net loss	$ (16,682)	$ (33,167)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	330	297
Change in fair value of warrant liability	132	(122)
Amortization of debt discount and debt issuance costs	134	106
Write-off of deferred offering costs	—	1,789
Stock-based compensation	638	2,069
Loss on disposal of fixed asset	19	—
Increase (decrease) in cash from:		
Accounts receivable	36	—
Prepaid expenses and other current assets	34	(66)
Accounts payable	911	(343)
Accrued expenses	(605)	2,108
Other liabilities	(36)	(19)
Net cash used in operating activities	(15,089)	(27,348)
Cash flows from investing activities:		
Purchases of property and equipment	(252)	(153)
Net cash used in investing activities	(252)	(153)
Cash flows from financing activities:		
Proceeds from issuance of Series B-1 convertible preferred stock	7,000	—
Proceeds from issuance of Series C convertible preferred stock	—	67,922
Proceeds from venture debt refinancing	5,000	1,333
Payment of principal on venture debt facility	—	(1,333)
Payment of venture debt issuance costs	(3)	(23)
Payment of Series B-1 issuance costs	(115)	—
Payment of Series C issuance costs	—	(402)
Payment of deferred offering costs	(1,506)	(283)
Proceeds from exercise of stock options	104	—
Net cash provided by financing activities	10,480	67,214
Net (decrease) increase in cash	(4,861)	39,713
Cash at beginning of period	10,620	5,759
Cash at end of period	$ 5,759	$ 45,472
Supplemental disclosure of non-cash investing and financing activities:		
Deferred offering costs included in accounts payable and accruals	$ 226	$ —
Fair value of warrants issued in connection with venture debt	—	$ 225
Supplemental cash flow information—Cash paid for interest	$ 442	$ 681

The accompanying notes are an integral part of these financial statements.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS

(Amounts in thousands, except share and per share amounts)

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Nature of Business—Kala Pharmaceuticals, Inc. (the "Company") was incorporated on July 7, 2009, and is a biopharmaceutical company focused on the development and commercialization of therapies using its proprietary nanoparticle-based Mucus Penetrating Particles, or MPP, technology, with an initial focus on the treatment of eye diseases. KPI-121, the Company's lead program, consists of topically applied MPP nanosuspensions of loteprednol etabonate, or LE, a corticosteroid designed for ocular applications. Under its KPI-121 program, the Company has two product candidates in Phase 3 clinical trials, one for the indications of the treatment of post-operative inflammation and pain following ocular surgery and one for the temporary relief of the signs and symptoms of dry eye disease. The Company is also evaluating compounds in its topically applied MPP receptor Tyrosine Kinase Inhibitor program, or rTKI program, that inhibit the vascular endothelial growth factor, or VEGF, pathway, for the potential treatment of a number of retinal diseases.

The Company is engaged in research and development activities, raising capital and recruiting skilled personnel. The Company is subject to a number of risks similar to those of other companies conducting high-risk, early-stage research and development of pharmaceutical product candidates. Principal among these risks are dependence on key individuals and intellectual property, competition from other products and companies and the technical risks associated with the successful research, development and marketing of its product candidates. The Company's success is dependent upon its ability to raise additional capital in order to fund ongoing research and development, obtain regulatory approval of its products, successfully commercialize its products, generate revenue, meet its obligations, and, ultimately, attain profitable operations.

Basis of Presentation—The accompanying financial statements have been prepared on a going concern basis which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Since inception, the Company has not generated revenue from the sale of products and has incurred recurring losses and negative cash flows from operations, including a net loss of $16,682 and $33,167 for the years ended December 31, 2015 and 2016, respectively and used cash in operations of $15,089 and $27,348 in the years ended December 31, 2015 and 2016, respectively. The Company has financed its operations to date primarily through the issuance of convertible preferred stock, convertible promissory notes and debt. The Company expects to incur additional operating losses and negative operating cash flows for the foreseeable future. The Company also has debt repayments of $556 due in 2017. As of March 30, 2017, the Company expects that its cash of $45,472 as of December 31, 2016 will be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months from the date these financial statements were issued. This evaluation is based on relevant conditions and events that are known and reasonably knowable at the date that the financial statements are issued, including:

a) The Company's current financial condition, including its liquidity sources;

b) The Company's conditional and unconditional obligations due or anticipated within one year;

c) The funds necessary to maintain the Company's operations considering its current financial condition, obligations, and other expected cash flows; and

d) Other conditions and events, when considered in conjunction with the above that may adversely affect the Company's ability to meet its obligations.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION (Continued)

The viability of the Company beyond that point is dependent on its ability to raise additional capital to finance its operations. There can be no assurance that the Company will be able to generate revenue sufficient to cover its costs or obtain capital on acceptable terms, if at all.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expense, and related disclosures. The Company bases estimates and assumptions on historical experience when available and on various factors that it believes to be reasonable under the circumstances. The Company evaluates its estimates and assumptions on an ongoing basis. Estimates relied upon in preparing these financial statements relate to, but are not limited to, the fair value of common stock, preferred stock, warrants, stock compensation, accrued expenses and the recoverability of the Company's net deferred tax assets and related valuation allowance. Actual results may differ from these estimates under different assumptions or conditions.

Unaudited Pro Forma Information—The unaudited pro forma balance sheet as of December 31, 2016 assumes the automatic conversion of all outstanding preferred stock into shares of common stock and the reclassification of the Company's outstanding warrants to purchase shares of Series Seed Convertible Preferred Stock ("Series Seed Preferred Stock"), Series B Convertible Preferred Stock ("Series B Preferred Stock"), and Series C Convertible Preferred Stock ("Series C Preferred Stock") from liability classification to equity classification, in each case occurring upon the closing of the Company's proposed initial public offering ("IPO"), as if these transactions had occurred on December 31, 2016.

Cash and Concentration of Credit Risk—Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash. Periodically, the Company maintains deposits in accredited financial institutions in excess of federally insured limits. The Company deposits its cash in financial institutions that it believes have high credit quality and has not experienced any losses on such accounts and does not believe it is exposed to any unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

During the year ended December 31, 2015, two counterparties accounted for 100% of the Company's revenue.

Restricted Cash—The Company had restricted cash of $109 as of December 31, 2015 and 2016, which represents certificates of deposit serving as collateral for the Company's credit card and facility leases. This cash is classified as a non-current asset in the accompanying balance sheets.

Deferred Offering Costs—The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with the IPO as other non-current assets until the IPO is consummated. After consummation of the IPO, these costs will be recorded in stockholders' equity (deficit) as a reduction of additional paid-in capital generated as a result of the offering. If the Company terminates its plan for an IPO, any costs deferred will be expensed immediately . On September 11, 2015, the Board authorized the Company to confidentially submit a draft registration

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

statement to the Securities and Exchange Commission to sell shares of its common stock to the public. The Company incurred costs of $1,789 directly related to the proposed offering. During the second quarter of 2016, the Company determined that it was likely its IPO would be postponed for a period in excess of 90 days. As a result, in accordance with the Securities and Exchange Commission guidance in Staff Accounting Bulletin Topic 5-A, *Expenses of Offering*, the Company expensed the previously deferred IPO costs of $1,789 as general and administrative expenses in the year ended December 31, 2016.

Property and Equipment, net—Property and equipment are recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the related assets. Depreciation expense is included in research and development and general and administrative expenses. Laboratory equipment is depreciated over five years and office and computer equipment is depreciated over three years. Leasehold improvements are depreciated over the shorter of their useful life or the life of the lease. Major additions and upgrades are capitalized; maintenance and repairs, which do not improve or extend the life of the respective assets, are expensed as incurred. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in loss from operations.

Patent Costs—Costs to secure and defend patents are expensed as incurred and are classified as general and administrative expenses in the Company's statements of operations.

Impairment of Long-Lived Assets—Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When such events occur, the Company compares the carrying amounts of the assets to their undiscounted expected future cash flows. If the undiscounted cash flows are insufficient to recover the carrying value, the assets are recorded at the lesser of the carrying value or fair value. For the years ended December 31, 2015 and 2016, no impairments were recorded.

Fair Value Measurements—Certain assets and liabilities are carried at fair value. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The Company's preferred stock warrant liability is carried at fair value determined according to the fair value hierarchy described above (See Note 8) and classified as a Level 3 measurement. The carrying value of accounts payable and accrued expenses approximate their fair value due to the short-term nature of these assets and liabilities. Management believes that the Company's long-term debt (See Note 6) bears interest at the prevailing market rate for instruments with similar characteristics and, accordingly, the carrying value of long-term debt, including the current portion, also approximates its fair value. The fair value of the outstanding debt was estimated using a discounted cash flow analysis based on current market interest rates for debt issuances with similar remaining years to maturity, adjusted for credit risk, which represents a Level 3 measurement.

Segment Information—Operating segments are identified as components of an enterprise about which separate discrete financial information is made available for evaluation by the chief operating decision maker ("CODM") in making decisions regarding resource allocation and assessing performance. The CODM is the Company's Chief Executive Officer. The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is on the development and commercialization of therapeutics using its proprietary nanoparticle-based Mucus Penetrating Particles technology. All of the Company's tangible assets are held in the United States. To date, all of the Company's revenue has been generated in the United States.

Revenue Recognition—Revenue is recognized when the following criteria have been met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered and risk of loss has passed; (3) the seller's price to the buyer is fixed or determinable; and (4) collectability is reasonably assured. Deferred revenue is recorded for any amounts received prior to satisfying the revenue recognition criteria. The Company recognized an immaterial amount of revenue during the year ended December 31, 2015, related to the completion of services associated with two feasibility arrangements that were substantially complete as of December 31, 2014. There was no revenue recognized during the year ended December 31, 2016, as there were no new revenue arrangements since the completion of the aforementioned feasibility studies.

Research and Development Costs—Research and development expenses consist of expenses incurred in performing research and development activities, including compensation and benefits for full-time research and development employees, an allocation of facilities expenses, overhead expenses, payments to universities under the Company's license agreements and other outside expenses. Research and development costs are expensed as incurred. Research and development costs that are paid in advance of performance, including nonrefundable prepayments for goods or services, are deferred and capitalized as a prepaid expense. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered or the services rendered.

Accrued Expenses—The Company accrues expenses related to development activities performed by third parties based on an evaluation of services received and efforts expended pursuant to the terms of the contractual arrangements. Payments under some of these contracts depend on clinical trial milestones. There may be instances in which payments made to the Company's vendors will exceed the level of services provided and result in a prepayment of expenses. In accruing service fees, the

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Company estimates the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, the Company will adjust the accrual or prepaid expense accordingly.

Stock-Based Compensation—The Company accounts for all stock-based payment awards granted to employees and non-employees as compensation expense at fair value. The Company's stock-based payments include stock options and grants of common stock, including common stock subject to vesting. The measurement date for employee awards is the date of grant, and stock-based compensation costs are recognized as expense over the employees' requisite service period, which is the vesting period, on a straight-line basis. The measurement date for nonemployee awards is generally the date the services are completed, resulting in periodic adjustments to stock-based compensation during the vesting terms for changes in the fair value of the awards. Stock-based compensation costs for nonemployees are recognized as expense over the vesting period on a straight-line basis. Stock-based compensation is classified in the accompanying statements of operations based on the function to which the related services are provided.

The Company recognizes compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company's estimate, the Company may be required to record adjustments to stock- based compensation expense in future periods.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company has historically been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends on common stock and does not expect to pay any cash dividends in the foreseeable future.

Common Stock Valuation—Due to the absence of an active market for the Company's common stock, the Company utilized methodologies in accordance with the framework of the American Institute of Certified Public Accountants Technical Practice Aid, Valuation of Privately-Held Company Equity Securities Issued as Compensation, to estimate the fair value of its common stock. In determining the exercise prices for options granted, the Company has considered the estimated fair value of the common stock as of the measurement date. The estimated fair value of the common stock has been determined at each grant date based upon a variety of factors, including the illiquid nature of the common stock, arm's-length sales of the Company's capital stock (including redeemable convertible preferred stock), the effect of the rights and preferences of the preferred shareholders, and the

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

prospects of a liquidity event. Among other factors are the Company's financial position and historical financial performance, the status of technological developments within the Company's research, the composition and ability of the current research and management team, an evaluation or benchmark of the Company's competition, and the current business climate in the marketplace. Significant changes to the key assumptions underlying the factors used could result in different fair values of common stock at each valuation date.

Preferred Stock Warrants—The Company classifies warrants to purchase shares of its Series Seed Preferred Stock, Series A Convertible Preferred Stock ("Series A Preferred Stock"), Series B Preferred Stock, and Series C Preferred Stock as a liability on its balance sheets as these warrants are free-standing financial instruments that are exercisable for contingently redeemable shares. The warrants are recorded in long-term liabilities at fair value, estimated using the Black-Scholes model, and marked to market at each balance sheet date. The change in carrying value is reported as the change in fair value of warrant liability in the accompanying statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the exercise of the warrant, the expiration of the warrant or the warrant converting to a warrant to purchase common stock, which will occur upon the closing of the IPO in accordance with the conversion rights described in Note 8.

Income Taxes—Deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the Company's financial statements and tax returns. Deferred tax assets and liabilities are determined based upon the differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. The Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the 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 is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. As a result, reserves are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present.

Net Loss per Share and Unaudited Pro Forma Loss per Share—Basic net loss per share is computed using the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including the assumed exercise of stock options and 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 participation rights in

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

any dividend paid by the Company and is deemed to be a participating security. 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 losses of the Company and are not included in the calculation of net loss per share in the periods in which a net loss is recorded.

Diluted net loss per share is computed using the more dilutive of (a) the two-class method or (b) the if converted method. The Company allocates earnings first to preferred stockholders based on dividend rights and then to common and preferred stockholders based on ownership interests. The weighted average number of common shares included in the computation of diluted net loss gives effect to all potentially dilutive common equivalent shares, including outstanding stock options, warrants, preferred stock and the potential issuance of stock upon the conversion of the Company's convertible notes. Common stock equivalent shares are excluded from the computation of diluted net loss per share if their effect is antidilutive. 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 issued if their effect is anti-dilutive. When a gain is recorded pursuant to a change in fair value of the warrant liability during the period, the Company assesses whether the impact of reversing the gain and including the additional securities is dilutive, and if so, will adjust dilutive EPS. The Company reported a net loss attributable to common stockholders for the years ended December 31, 2015 and 2016.

Unaudited pro forma net loss per share applicable to common stockholders is computed using the weighted-average number of common shares outstanding after giving effect to the conversion of all outstanding convertible preferred stock into shares of common stock as if such conversion had occurred on January 1, 2016, or the date of original issuance, if later.

Comprehensive Loss—Comprehensive loss is equal to net loss for the periods presented.

Recently Adopted Accounting Pronouncements—In November 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-17, *Balance Sheet Classification of Deferred Taxes* ("ASU 2015-17"). ASU 2015-17 requires deferred tax liabilities and assets to be classified as non-current in the balance sheet. ASU 2015-17 is required to be adopted for annual periods beginning after December 15, 2016, including interim periods within those fiscal years. The amendment may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The adoption of this guidance did not have a material impact on the Company's financial statements and related disclosures.

In April 2015, the FASB issued ASU No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs* ("ASU 2015-03"), which requires that debt issuance costs related to a debt liability be presented in the balance sheet as a direct reduction in the carrying amount of that debt liability and the costs are amortized over the life of the debt facility to interest expense. The amendments in ASU 2015-03 are effective for the annual periods ending after December 15, 2015. Early adoption is permitted. Upon adoption, the amendments in ASU No. 2015-03 are required to be applied on a retrospective basis as a change in accounting principle for all prior periods presented. The Company elected to early adopt this

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

guidance as of September 30, 2015 and recorded all previously recognized debt issuance costs as a direct reduction to the carrying amount of the related debt liability at each reporting date.

In November 2014, the FASB issued ASU No. 2014-16, *Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity* ("ASU 2014-16"). The guidance requires an entity to determine the nature of the host contract by considering all stated and implied substantive terms and features of the hybrid financial instrument, weighing each term and feature on the basis of the relevant facts and circumstances (commonly referred to as the whole-instrument approach). The Company adopted the standard on the required effective date of January 1, 2016, and its adoption had no material impact on the Company's financial position, results of operations or cash flows.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's ability to Continue as a Going Concern*, which provides guidance in Generally Accepted Accounting Principles (GAAP) about management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern and to provide related footnote disclosures. The amendments in ASU 2014-15 are effective for the annual period ending after December 15, 2016 and for annual and interim periods thereafter. The adoption of this standard had no material impact on the Company's financial position, results of operations or cash flows.

Recently Issued Accounting Pronouncements—In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows Restricted Cash* ("ASU 2016-18"). This new standard requires companies to include amounts generally described as restricted cash and restricted cash equivalents in cash and cash equivalents when reconciling beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This guidance is effective for annual and interim reporting periods beginning after December 15, 2017, and required retrospective application. The Company believes that the adoption of ASU 2016-18 will not have a material impact on its financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), to address diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently evaluating the impact that the adoption of ASU 2016-15, but believes its adoption will have no material impact on its statement of cash flows.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). 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, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

today. ASU 2016-02 (ASC Topic 842) supersedes the previous leases standard, ASC 840, *Leases*. The standard is effective for public entities for annual periods beginning after December 15, 2018 and for interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2016-02 will have on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), which simplifies share-based payment accounting through a variety of amendments. The standard is effective for annual periods beginning after December 15, 2016 and for interim periods within those fiscal years. Early adoption is permitted. The Company expects that its adoption of ASU 2016-09 will not have a material impact on its financial position, results of operations or cash flows.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), which supersedes existing revenue recognition guidance. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The standard defines a five-step process to achieve this principle and will require companies to use more judgment and make more estimates than under the current guidance. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. In April 2016, the FASB issued ASU 2016-10, *Revenue From Contracts With Customers: Identifying Performance Obligations and Licensing* ("ASU 2016-10"), which addresses certain implementation issues and clarifies certain core revenue recognition principles of ASU 2014-09. In July 2015, the FASB voted to delay the effective date of this standard such that ASU 2014-09, as amended by ASU 2016-10, will be effective for the Company for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. Until such time the Company enters into a material revenue arrangement, it is not possible to evaluate whether the new standard will have a material impact on the Company's financial statements.

3. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2015	2016
Rent	$ 53	$ 58
Insurance	14	55
Deferred offering costs	1,732	—
Other	43	41
Prepaid expenses and other current assets	$ 1,842	$ 154

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

4. PROPERTY AND EQUIPMENT, NET

Property and equipment, net, consists of the following:

	December 31, 2015	December 31, 2016
Laboratory equipment	$ 1,576	$ 1,729
Leasehold improvements	93	93
Computer hardware and software	54	54
Office equipment	23	23
Furniture and fixtures	11	11
Property and equipment—at cost	1,757	1,910
Less: Accumulated depreciation	(1,019)	(1,316)
Property and equipment—net	$ 738	$ 594

Depreciation expense for the years ended December 31, 2015 and 2016 was $330 and $297, respectively.

5. ACCRUED EXPENSES

Accrued expenses consist of the following:

	December 31, 2015	December 31, 2016
Development costs	$ 701	$ 2,280
Compensation and benefits	968	1,480
Professional fees	157	171
Deferred offering costs	184	—
Other	93	62
Accrued expenses	$ 2,103	$ 3,993

6. DEBT

2014 Debt Facility

In November 2014, the Company entered into a venture debt facility ("2014 Debt Facility") for a total loan commitment of $10,000, of which $5,000 was borrowed upon entering into the agreement and the remaining $5,000 was borrowed in July 2015. Under the terms of the facility, the borrowings accrued interest at an annual rate equal to the greater of (i) 3.00% above the Prime Rate then in effect, or (ii) 6.25%. The interest rate was 6.25% as of December 31, 2015, and 6.50% as of December 31, 2016. Interest is payable monthly in arrears, and, prior to entering into the First Amendment to the 2014 Debt Facility (the "First Amendment"), as described below, monthly principal payments were to commence in July 2016. The Company incurred debt issuance costs of $72 and paid $138 in fees on behalf of the lender in connection with entering into the 2014 Debt Facility, all of which were recorded a reduction in the carrying value of the long-term debt balance. The discount balance resulting from these costs, in addition to the fair value of the warrants issued, as discussed

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

6. DEBT (Continued)

below, is being amortized to interest expense through the maturity date using the effective interest method.

On October 13, 2016, the Company entered into the First Amendment. The First Amendment reaffirmed the initial commitment to a total of $10,000 of funding ("Term Loan A") and increased the Company's total borrowing capacity by an additional $10,000 ("Term Loan B" and together with Term Loan A, "Term Loans") subject to the following conditions: (i) the minimum borrowing amount is $250 for each incremental borrowing under Term Loan B; (ii) The Term Loans, once repaid, may not be re-borrowed; (iii) the Company may prepay the Term Loans subject to the payment of a prepayment fee ranging from 0.3% to 0.9%; and (iv) the commitment to fund Term Loan B is contingent upon the Company providing evidence of positive results sufficient to support an NDA submission for the treatment of inflammation and pain following ocular surgery based on the Company's second Phase 3 trial of KPI-121. Funding under the Term Loan B commitment is available through October 13, 2017. In addition, the interest-only end date was extended from June 2016 to October 13, 2017 and the term loan maturity date was extended from December 1, 2018 to October 13, 2020. The Company has not accrued for the prepayment fee as it does not intend to prepay the outstanding balance. The 2014 Debt Facility is not subject to financial covenants. As of December 31, 2016, the Company had not completed the second Phase 3 trial and therefore Term Loan B was not available to be drawn.

The Company accounted for the First Amendment to the 2014 Debt Facility as a debt modification of the prior agreement and paid $23 in fees on behalf of the lender in connection with the First Amendment, all of which were capitalized and recorded within debt discount (a reduction to the long-term debt balance) and are being amortized to interest expense using the effective interest method through the maturity date. New fees of $29, paid to third parties that were associated with the First Amendment, were expensed as incurred.

The 2014 Debt Facility, as amended, is senior debt and is secured by substantially all of the assets of the Company other than intellectual property. The Company's ability to pay cash dividends is currently restricted by the terms of the 2014 Debt Facility. In the event the Company is determined to be in default under the 2014 Debt Facility, the outstanding balance accrues interest at five percentage points above the interest rate applicable immediately prior to the occurrence of the event of default and the lender has the right to declare all outstanding principal and interest payable. Under the terms of the 2014 Debt Facility, certain events including but not limited to, the Company's failure to pay obligations when due, failure to perform obligations under the agreement, insolvency or the occurrence of any circumstance that could reasonably be expected to have a material adverse effect on the Company, constitute events of default.

In connection with the 2014 Debt Facility and the initial borrowing of $5,000 under Term Loan A, the Company issued warrants to the lender to purchase 138,889 shares of Series B Preferred Stock at an exercise price of $1.44 per share (the "2014 Warrants"). During 2015 the Company borrowed an additional $5,000 under Term Loan A and the number of exercisable shares underlying the 2014 Warrants increased to 277,778 shares. Upon executing the First Amendment, the Company issued warrants to purchase up to 251,951 shares of Series C Preferred Stock at an exercise price of $1.59 per share (the "2016 Warrants"). Consistent with the warrants issued under the original 2014 Debt Facility, the number of shares of Series C Preferred Stock that become exercisable increases in proportion to the amount of Term Loan B borrowings. The 2016 Warrants were not exercisable into shares as of the

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

6. DEBT (Continued)

First Amendment date or December 31, 2016, as the Company had not borrowed under the Term B Loan during 2016.

Upon issuance of the 2014 Warrants and 2016 Warrants, the Company estimated the fair value of the warrants using the Black-Scholes option-pricing model (see Note 7), and recorded the estimated fair value of the warrants as a liability separate from the loan balance, resulting in additional debt discount included within long-term debt that is amortized to interest expense over the term of the loan using the effective interest method. The initial fair value of the 2014 Warrants and 2016 Warrants was $140 and $225, respectively. The warrants are subsequently re-measured to fair value at every reporting date with changes in fair value recorded in the statement of operations as a component of other income (expense), as the shares underlying the warrants are exercisable into contingently redeemable shares.

As of December 31, 2015 and 2016, the estimated fair value of the warrant liability associated with the original 2014 Debt Facility was $282 and $274, respectively, and the estimated fair value of the warrant liability associated with the First Amendment was $0 and $263, respectively.

The unpaid principal balance under the 2014 Debt Facility was $10,000 as of December 31, 2015 and 2016. The unamortized discount was $205 and $346 as of December 31, 2015 and 2016, respectively. The Company recognized interest expense of $604 related to the 2014 Debt Facility during the year ended December 31, 2015, which consisted of the amortization of the debt discount of $134 and contractual coupon interest of $470. During the year ended December 31, 2016, the Company recognized interest expense of $767, which consisted of amortization of the debt discount of $106 and the contractual coupon interest of $661.

The future annual principal payments due under the 2014 Debt Facility as of December 31, 2016 were as follows:

Year Ending December 31,		
2017	$	556
2018		3,333
2019		3,333
2020		2,778
Total	$	10,000

7. PREFERRED STOCK WARRANTS

In addition to the warrants issued in connection with the 2014 Debt Facility and the First Amendment, the Company has issued warrants in connection with debt transactions that were completed prior to 2014, all of which are classified as liabilities and are remeasured at fair value at

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

7. PREFERRED STOCK WARRANTS (Continued)

each reporting period, as the warrants are exercisable into contingently redeemable shares. The following table summarizes the warrants outstanding at each of the dates identified:

Issued	Exercisable for	Exercise Price	Expiration Date	Shares Exercisable at December 31, 2015	Shares Exercisable at December 31, 2016
2011 and 2012	Series Seed Preferred Stock	$ 1.00	July 2019	80,000	80,000
2013	Series B Preferred Stock	$ 1.44	April 2021	694,444	694,444
2014	Series B Preferred Stock	$ 1.44	November 2024	138,889	277,778
2016	Series C Preferred Stock	$ 1.59	October 2026	—	—(1)

(1) As of December 31, 2016, warrants outstanding to acquire Series C Preferred Stock were not exercisable into shares of Series C Preferred Stock; however, only upon draw down of Term Loan B, the warrants will become exercisable into a maximum of 251,951 shares of Series C Preferred Stock.

8. FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company's preferred stock warrants associated with the issuances of the 2014 Debt Facility and the First Amendment, as well as debt transactions entered into prior to 2014, are recorded at fair value. The assets and liabilities measured at fair value on a recurring basis as of December 31, 2015 and 2016 and the input categories associated with those assets and liabilities are as follows:

	Carrying Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2015				
2011 and 2012 Series Seed Warrants	$ 53	$ —	$ —	$ 53
2013 Series B Warrants	601	—	—	601
2014 Series B Warrants	282	—	—	282
Total warranty liability	$ 936	$ —	$ —	$ 936
December 31, 2016				
2011 and 2012 Series Seed Warrants	$ 39	$ —	$ —	$ 39
2013 Series B Warrants	463	—	—	463
2014 Series B Warrants	274	—	—	274
2016 Series C Warrants	263	—	—	263
Total warranty liability	$ 1,039	$ —	$ —	$ 1,039

The Company has classified the value of the warrants as Level 3 measurements within the fair value hierarchy because the fair value is derived using significant unobservable inputs, which include the estimated volatility, the estimated fair value of the underlying preferred stock, and to the extent that the number of exercisable shares underlying the warrants are adjustable based on the amount of

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

8. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

the Term Loans drawn down, the probability that the Company will draw down on the debt facility. The Company determined the fair values of the warrants, using the Black-Scholes option-pricing model using the following assumptions:

	2011 and 2012 Series Seed Warrants	2013 Series B Warrants	2014 Series B Warrants	Series C Warrants
December 31, 2015				
Volatility	98.50%	102.30%	103.10%	—
Risk-free interest rate	1.40%	1.80%	2.20%	—
Estimated fair value of underlying shares	$ 1.01	$ 1.16	$ 1.16	—
Remaining contractual term	3.5	5.0	9.0	—
Expected dividend yield	0%	0%	0%	—
December 31, 2016				
Volitality	100.00%	87.00%	114.00%	58.30%
Risk-free interest rate	1.30%	1.80%	2.30%	2.40%
Estimated fair value of underlying shares	$ 0.89	$ 1.11	$ 1.11	$ 1.54
Remaining contractual term (years)	2.6	4.3	7.9	9.8
Expected dividend yield	0%	0%	0%	0%

For purposes of determining the fair value of the warrants to purchase Series C Preferred Stock, the Company estimated that there is a 100% probability that it will draw down on the remaining $10,000 available under the 2014 Debt Facility, and as such, assumed that the warrants will be exercisable into the maximum number of shares stipulated in the First Amendment. With respect to the aggregate warrant liabilities recorded as of December 31, 2015 and 2016, a change in the assumptions regarding estimated volatility and/or the estimated fair value of the preferred stock could have a significant impact on the resulting fair values of the warrant liabilities.

The following table provides a summary of changes in the fair value of the Company's derivative liability, which is included as a component of other (income) expense:

	Warranty Liability
Fair value—January 1, 2015	$ 804
Change in fair value of warrant liability	132
Fair value—December 31, 2015	936
Fair value of 2016 Warrants upon First Amendment	225
Change in fair value of warrant liability	(122)
Fair value—December 31, 2016	$ 1,039

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

9. CONVERTIBLE PREFERRED STOCK

Preferred stock consisted of the following as of December 31, 2015:

	Designated Shares	Issuance Dates	Shares Issued and Outstanding	Liquidation Value	Carrying Value	Common Stock Issuable Upon Conversion
Series Seed	11,323,209	December 2009	2,000,001			
		October 2010	2,000,003			
		February 2012	7,243,205			
			11,243,209	$ 11,243	$ 11,065	11,243,209
Series A	9,583,432	February 2013	4,791,716			
		July 2013	4,791,716	$ 11,500	$ 10,736	9,583,432
			9,583,432			
Series B	16,597,221	April 2014	15,624,999	$ 22,500	$ 22,185	15,624,999
Series B-1	4,629,629	August 2015	4,629,629	$ 7,000	$ 6,885	4,629,629

Preferred stock consisted of the following as of December 31, 2016:

	Designated Shares	Issuance Dates	Shares Issued and Outstanding	Liquidation Value	Carrying Value	Common Stock Issuable Upon Conversion
Series Seed	11,323,209	December 2009	2,000,001			
		October 2010	2,000,003			
		February 2012	7,243,205			
			11,243,209	$ 11,243	$ 11,065	11,243,209
Series A	9,583,432	February 2013	4,791,716			
		July 2013	4,791,716	$ 11,500	$ 10,736	9,583,432
			9,583,432			
Series B	16,597,221	April 2014	15,624,999	$ 22,500	$ 22,185	15,624,999
Series B-1	4,629,629	August 2015	4,629,629	$ 7,000	$ 6,885	4,629,629
Series C	42,782,688	April 2016	42,782,688	$ 67,922	$ 67,520	42,782,688

Series Seed Convertible Preferred Stock

In December 2009, the Company issued an aggregate of 2,000,001 shares of Series Seed Preferred Stock for gross proceeds of $2,000 or $1.00 per share. In October 2010, the Company issued an aggregate of 2,000,003 shares of Series Seed Preferred Stock to existing investors for gross proceeds of $2,000 or $1.00 per share. In February 2012, the Company issued an aggregate of 7,243,205 shares of Series Seed Preferred Stock to existing and new investors, which included 6,150,000 shares for gross proceeds of $6,150 and 1,093,205 shares converted from convertible debt of $1,000 principal and $93

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

9. CONVERTIBLE PREFERRED STOCK (Continued)

accrued interest. Costs incurred in connection with each of the individual issuances of Series Seed Preferred Stock were $124, $39 and $15 respectively, which have been recorded as a reduction to the carrying amount of the Series Seed Preferred Stock.

Series A Convertible Preferred Stock

In February 2013, the Company issued 4,791,716 shares of Series A Preferred Stock, at a purchase price of $1.20 per share for gross proceeds of $5,750.

Additionally, in accordance with the terms of the Series A Preferred Stock Purchase Agreement, investors were granted the right to purchase up to an additional 4,791,716 shares of Series A Preferred Stock, at a price of $1.20 per share, upon the Company meeting certain milestone criteria by December 31, 2013, approval of the Board and approval of the investors holding a majority of the outstanding shares of Series A Preferred Stock.

In June 2013, the Board approved waiving one of the milestone events provided for in the Series A Preferred Stock Purchase Agreement. Accordingly, the second tranche of Series A Preferred Stock closed on July 15, 2013 and the Company issued 4,791,716 shares of Series A Preferred Stock for gross proceeds of $5,750, or $1.20 per share. Costs incurred in connection with the issuance of the Series A Preferred Stock were $93, which have been recorded as a reduction in the carrying amount of the Series A Preferred Stock.

Series B Convertible Preferred Stock

In April 2014, the Company issued 15,624,999 shares of Series B Preferred Stock for gross proceeds of $22,500 or $1.44 per share which included conversion of the outstanding principal and interest on the 2013 Notes (See Note 7) of $5,130, which converted into 3,562,785 shares of Series B Preferred Stock pursuant to the terms of the Notes. Costs incurred in connection with the issuance of the Series B Preferred Stock were $315, which have been recorded as a reduction in the carrying amount of the Series B Preferred Stock.

Series B-1 Convertible Preferred Stock

On August 17, 2015, the Company issued 4,629,629 shares of Series B-1 Senior Convertible Preferred Stock ("Series B-1 Preferred Stock") for gross proceeds of $7,000 or $1.512 per share. Costs incurred in connection with the issuance of the Series B-1 Preferred Stock were $115, which have been recorded as a reduction in the carrying amount of the Series B-1 Preferred Stock.

Series C Convertible Preferred Stock

On April 5, 2016, the Company issued 42,782,688 shares of Series C Preferred Stock for gross proceeds of $67,922 or $1.5876 per share. Costs incurred in connection with the issuance of the Series C Preferred Stock were $402, which have been recorded as a reduction in the carrying amount of the Series C Preferred Stock.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

9. CONVERTIBLE PREFERRED STOCK (Continued)

Terms Applicable to Each Series of Preferred Stock

The Series Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock are classified outside of stockholders' (deficit) equity because the shares contain certain redemption features that are not solely within the control of the Company.

The rights, preferences, and privileges of the preferred stock are as follows:

Voting—Preferred stockholders are entitled to vote on all matters and are entitled to the number of votes equal to the number of shares of common stock into which each share of preferred stock is then convertible.

Dividends—Preferred stockholders are entitled to receive, when and if declared by the Board out of any funds legally available, dividends at the rate of 8% of the original issue price per share. No such dividends have been declared or paid through December 31, 2016.

Liquidation Rights—Upon any liquidation, dissolution, or winding-up of the Company, whether voluntary or involuntary, each holder of the then outstanding Series C Preferred Stock and then Series B Preferred Stock and Series B-1 Preferred Stock shall be entitled to distribution, before any distribution of payments is made to holders of Series Seed Preferred Stock or Series A Preferred Stock or common stockholders, an amount equal to the greater of (i) (A) in the case of the Series C Preferred Stock, $1.5876 per share (B) in the case of the Series B Preferred Stock, $1.44 per share and (C) in the case of the Series B-1 Preferred Stock, $1.512 per share, plus, in each case, any declared but unpaid dividends and (ii) the amount such holder would have received if such holder had converted its shares into common stock immediately prior to such liquidation, dissolution, or winding-up of the Company. After the payment of the preferential amounts to the holders of the Series C Preferred Stock, then Series B Preferred Stock and the Series B-1 Preferred Stock, the holders of the Series Seed Preferred Stock and Series A Preferred Stock are entitled to a distribution of an amount equal to the greater of (i) (A) in the case of the Series Seed Preferred Stock $1.00 per share, (B) in the case of the Series A Preferred Stock $1.20 per share, plus, in each case, an amount equal to all declared but unpaid dividends; and (ii) the amount such holder would have received if such holder had converted its shares into common stock immediately prior to such liquidation, dissolution, or winding-up of the Company.

If there are insufficient assets legally available to make the distribution to the holders of the Series Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, and Series C Preferred Stock in full, then the available assets shall be distributed on a pro rata basis, first to the holders of the Series C Preferred Stock and then to Series B Preferred Stock and Series B-1 Preferred Stock, then any remaining assets available will be distributed on a pro rata basis to the holders of the Series Seed Preferred Stock and Series A Preferred Stock. Any remaining assets legally available for distribution after satisfaction of the liquidation preferences of the preferred stock shall be distributed to the holders of common stock on a pro-rata basis based upon the number of shares of common stock held by the common stockholders.

Conversion—Each share of preferred stock is convertible into common stock, at any time, at the option of the holder, at the then applicable conversion rate for each series of preferred stock and

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

9. CONVERTIBLE PREFERRED STOCK (Continued)

subject to adjustment in accordance with anti-dilution provisions. As of December 31, 2016, each share of preferred stock is convertible into one share of common stock. Each share of preferred stock will automatically convert into common stock at the then applicable conversion rate for each series of preferred stock upon the earlier of (i) the closing of the Company's first underwritten public offering of its common stock at a price per share of not less than $12.50 subject to certain adjustments, in which the Company receives aggregate gross proceeds of at least $30,000, and that is listed on the New York Stock Exchange or NASDAQ Stock Market or (ii) a date specified by vote or written consent of the majority of the outstanding preferred stock. In addition, in the event that any holder of at least 500,000 shares of preferred stock does not participate in a Qualified Financing, as defined in the Company's Certificate of Incorporation, and/or restated from time to time (the "Charter"), effective upon the consummation of the Qualified Financing, a portion of the holder's preferred stock (as determined in accordance with the Charter) will automatically convert into a new series of preferred stock with the conversion price for such new series fixed at the applicable conversion price in effect immediately prior to the consummation of the Qualified Financing, and such conversion price will not be subject to any adjustment thereafter.

10. COMMON STOCK

Voting, dividend and liquidation rights of the holders of the common stock is subject to and qualified by the rights, powers and preferences of the holders of the preferred stock.

Voting—Each holder of outstanding shares of common stock shall be entitled to one vote in respect of each share. The holders of outstanding shares of common stock, voting together as a single class, shall be entitled to elect one director. The number of authorized shares of common stock may be increased or decreased by the affirmative vote of a majority of the outstanding shares of common stock and preferred stock voting together as a single class.

Dividends—Subject to the payment in full of all preferential dividends to which the holders of the preferred stock are entitled hereunder, the holders of common stock shall be entitled to receive dividends out of funds legally available therefor at such times and in such amounts as the Board may determine in its sole discretion, with holders of preferred stock and common stock sharing pari passu in such dividends.

Liquidation Rights—Upon any liquidation, after the payment or provision for payment of all debts and liabilities of the Company and all preferential amounts to which the holders of preferred stock are entitled with respect to the distribution of assets in liquidation, the holders of common stock shall be entitled to share ratably in the remaining assets of the Company available for distribution.

Reserved Shares—As of December 31, 2015 and 2016, the Company has reserved the following shares of common stock for potential conversion of the outstanding convertible preferred stock,

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

10. COMMON STOCK (Continued)

convertible preferred stock issuable upon exercise of rights under warrants and exercise of stock options:

	December 31,	
	2015	2016
Convertible preferred stock	41,081,269	83,863,957
2013 Warrant rights to acquire Series B Preferred Stock	694,444	694,444
2014 Warrant rights to acquire Series B Preferred Stock	277,778	277,778
2016 Warrant right to acquire Series C Preferred Stock (1)	—	251,951
2011 Warrant rights to acquire Series Seed Preferred Stock	80,000	80,000
2009 stock option plan	8,252,863	18,404,870
Total	50,386,354	103,573,000

(1) As of December 31, 2016, warrants outstanding to acquire Series C Preferred Stock were not exercisable into shares of Series C Preferred Stock; however, upon draw down of Term Loan B, the warrants will become exercisable into a maximum of 251,951 shares of Series C Preferred Stock.

11. STOCK-BASED COMPENSATION

Stock Incentive Plan—On December 11, 2009, the Board adopted the 2009 Employee, Director and Consultant Equity Incentive Plan (the "2009 Plan") for the issuance of common stock and stock options to employees, officers, directors, consultants, and advisors. As of December 31, 2015 and 2016, the Board had authorized 9,181,163 shares and 19,333,170 shares, respectively, of common stock to be issued under the 2009 Plan. Under the 2009 Plan, the Board determined the number of shares of common stock to be granted pursuant to the awards, as well as the exercise price and terms of such awards. The exercise price of incentive stock options cannot be less than the fair value of the common stock on the date of grant.

Stock options awarded under the 2009 Plan expire 10 years after the grant date, unless the Board sets a shorter term. Options granted under the plan generally vest over a four-year period. As of December 31, 2015 and 2016, there were 199,910 shares and 1,761,742 shares, respectively, of common stock available for future grant under the 2009 Plan. Upon the exercise of stock options, the Company issues new shares of common stock. The Company does not hold any treasury shares.

Stock Options—In determining the exercise prices for options granted, the Board has considered the fair value of the common stock as of the measurement date. The fair value of the common stock has been determined by the Board based on a variety of factors, including the Company's financial position, the status of development efforts within the Company, the composition and ability of the current scientific and management teams, the current climate in the market place, the illiquid nature of the Company's common stock, arm's-length sale of the Company's preferred stock, the effect of the

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

11. STOCK-BASED COMPENSATION (Continued)

rights and preferences of the preferred stockholders, and the prospects of a liquidity event, among others.

The Company has granted 448,207 stock options which contain performance-based vesting criteria. These criteria are milestone events that are specific to the Company's corporate goals. Stock-based compensation expense associated with performance-based stock options are recognized if the achievement of the performance condition is considered probable using management's best estimates. These milestones have not been deemed probable as of December 31, 2015 and 2016. As of December 31, 2015 and 2016, unrecognized compensation expense related to the performance-based awards was $53 and $42, respectively.

The Company granted 22,000 and 0 stock options to non-employees for the years ended December 31, 2015 and 2016, respectively. The Company recognized $54 and $57 in stock compensation expense related to non-employees for the years ended December 31, 2015 and 2016, respectively.

A portion of the unvested stock options will vest upon the sale of all or substantially all of the stock or assets of the Company.

A summary of option activity for employee and non-employee awards under the 2009 Plan for the year ended December 31, 2016 is as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2016	8,052,953	$ 0.61	8.7	$ 1,691
Granted	8,590,175	0.64		
Exercised	—	—		
Forfeited	—	—		
Outstanding at December 31, 2016	16,643,128	$ 0.62	8.6	$ 1,200
Vested and expected to vest at December 31, 2016	15,099,033	$ 0.62	8.6	$ 1,141
Options exercisable at December 31, 2016	5,395,653	$ 0.55	8.0	$ 823

The Company records stock-based compensation related to stock options granted at fair value. The Company utilizes the Black-Scholes option-pricing model to estimate the fair value of stock option grants and to determine the related compensation expense. The assumptions used in calculating the fair value of stock-based payment awards represent management's best estimates. The assumptions used in determining fair value of the stock options granted in the years ended December 31, 2015 and 2016 are as follows:

	Year Ended December 31,	
	2015	2016
Expected volatility	106% - 115%	106% - 110%
Risk-free interest rate	1.49% - 2.24%	1.21% - 1.45%
Expected dividend yield	0%	0%
Expected term (in years)	5.87 - 9.46	5.62 - 6.18

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

11. STOCK-BASED COMPENSATION (Continued)

The Company derived the risk-free interest rate assumption from the U.S. Treasury rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the expected term of the awards being valued. The Company based the assumed dividend yield on its expectation of not paying dividends in the foreseeable future. The Company calculated the weighted-average expected term of options using the simplified method, as the Company lacks relevant historical data due to the Company's limited operating experience. The estimated volatility is based upon the historical volatility of comparable companies with publicly available share prices. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The weighted average grant-date fair value of options granted during the years ended December 31, 2015 and 2016 was $0.80 and $0.52, respectively. The fair value is being expensed over the vesting period of the options on a straight-line basis as the services are being provided. The Company has recorded aggregate stock-based compensation expense related to the issuance of stock option awards of $638, and $2,069 during the years ended December 31, 2015 and 2016, respectively. As of December 31, 2016, there was $4,784 of unrecognized compensation cost related to the stock options granted under the 2009 Plan, which is expected to be expensed over a weighted-average period of 2.73 years. Stock-based compensation expense was classified in the statements of operations as follows:

	Year Ended December 31,	
	2015	2016
Research and development	$ 161	$ 461
General and administrative	477	1,608
Total	$ 638	$ 2,069

The Company received cash proceeds from the exercise of stock options of $104 during the year ended December 31, 2015 and $0 during the year ended 2016. The total intrinsic value of options exercised in 2015 was $552.

12. INCOME TAXES

The Company has had no income tax expense due to operating losses incurred for the years ended December 31, 2015 and 2016. The Company has also not recorded any income tax benefits for the net operating losses incurred in each period due to its uncertainty of realizing a benefit from those items. All of the Company's losses before income taxes were generated in the United States.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

12. INCOME TAXES (Continued)

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,	
	2015	2016
Federal statutory income tax rate	35.0%	35.0%
Effect of:		
Change in valuation allowance	(43.2)	(42.3)
State income taxes, net of federal benefit	6.3	4.7
Research and development tax credits	2.9	3.1
Other	(1.0)	(0.5)
Effective income tax rate	0.0%	0.0%

Net deferred tax assets as of December 31, 2015 and 2016 consisted of the following:

	December 31,	
	2015	2016
Net operating loss carryforwards	$ 23,301	$ 36,280
Research and development tax credit carryforwards	2,119	2,940
Start-up costs and other	1,048	1,807
Total deferred tax assets	26,468	41,027
Depreciation and amortization	(8)	8
Total deferred tax liabilities	(8)	8
Valuation allowance	(26,460)	(41,035)
Net deferred tax assets	$ —	$ —

The Company has evaluated the positive and negative evidence bearing upon its ability to realize the deferred tax assets. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets as of December 31, 2015 and 2016. The valuation allowance increased by $7,807 in 2015 and $14,575 in 2016 due to the increase in the net operating loss carryforwards and research and development tax credits. Management reevaluates the positive and negative evidence at each reporting period.

At December 31, 2015 and 2016, the Company has federal net operating loss carryforwards of $54,518 and $85,325, respectively, which may be available to offset future federal tax liabilities and expire at various dates beginning in 2030 through 2036. At December 31, 2015 and 2016, the Company has state net operating loss carryforwards of $53,073 and $80,500, respectively, which may be available to offset future state income tax liabilities and expire at various dates beginning in 2030 through 2036. As of December 31, 2015 and 2016, the Company also had federal and state research and development

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

12. INCOME TAXES (Continued)

credit carryforwards of approximately $2,119 and $2,940, respectively, which are available to reduce future income taxes, if any, from 2030 through 2036 (federal) and 2025 through 2031 (state).

Realization of the future tax benefits is dependent on many factors, including the Company's ability to generate taxable income within the net operating loss carryforward period. Under the provisions of Section 382 of the Internal Revenue Code of 1986, certain substantial changes in the Company's ownership, including a sale of the Company, or significant changes in ownership due to sales of equity, may have limited, or may limit in the future, the amount of net operating loss carryforwards, which could be used annually to offset future taxable income. The Company files its corporate income tax returns in the United States and Massachusetts, California, Kentucky, Pennsylvania, New York, Texas and New Hampshire. All tax years since the date of incorporation remain open to examination by the major taxing jurisdictions (state and federal) to which the Company is subject, as carryforward attributes generated in years past may still be adjusted upon examination by the Internal Revenue Service ("IRS") or other authorities if they have or will be used in a future period. The Company is not currently under examination by the IRS or any other jurisdictions for any tax year.

As of December 31, 2015 and 2016, the Company had no uncertain tax positions. The Company's policy is to recognize interest and penalties related to income tax matters as a component of income tax expense, of which no interest or penalties were recorded for the years ended December 31, 2015 and 2016.

Changes in the valuation allowance for deferred tax assets during the years ended December 31, 2015 and 2016 related primarily to the increases in net operating loss carryforwards and research and development tax credit carryforwards.

13. NET LOSS PER SHARE AND UNAUDITED PRO FORMA NET LOSS PER SHARE

Net Loss per Share—Basic and diluted net loss per share attributable to common stockholders were calculated as follows:

	Year Ended December 31,	
	2015	2016
Numerator:		
Net loss attributable to common stockholders	$ (16,682)	$ (33,167)
Denominator:		
Weighted average shares outstanding—basic and diluted	5,834,766	6,153,300
Net loss per share attributable to common stockholders—basic and diluted	$ (2.86)	$ (5.39)

The Company's potential dilutive securities, which include stock options, warrants to purchase preferred stock and convertible preferred stock, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

13. NET LOSS PER SHARE AND UNAUDITED PRO FORMA NET LOSS PER SHARE (Continued)

share attributable to common stockholders are the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	December 31,	
	2015	2016
Convertible preferred stock (as converted to common stock)	41,081,269	83,863,957
Options to purchase common stock	8,052,953	16,643,128
Preferred stock warrants(1)	1,052,222	1,304,173
	50,186,444	101,811,258

(1) Warrants outstanding as of December 31, 2016 include warrants to purchase Series C Preferred Stock for which the underlying shares included above of 251,951 are only exercisable upon the Company's draw down of the full amount of Term Loan B of $10,000.

Unaudited Pro Forma Net Loss per Share—The unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2016 gives effect to adjustments arising upon the closing of a qualified initial public offering. The unaudited pro forma net loss attributable to common stockholders used in the calculation of unaudited basic and diluted pro forma net loss per share attributable to common stockholders does not include the effects of the gain or loss from revaluation of the preferred stock warrant liability because it assumes that the conversion of convertible preferred stock into common stock had occurred on the later of January 1, 2016 or the issuance date of the convertible preferred stock.

The unaudited pro forma basic and diluted weighted average common shares outstanding used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2016 give effect, upon a qualified initial public offering, to (i) the automatic conversion of all shares of convertible preferred stock outstanding as of December 31, 2016 into 83,863,957 shares of common stock, and (ii) the outstanding warrants to purchase preferred stock becoming warrants to purchase shares of common stock, in each case as if the proposed initial public offering had occurred on the later of January 1, 2015 or the issuance date of the convertible preferred stock.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

13. NET LOSS PER SHARE AND UNAUDITED PRO FORMA NET LOSS PER SHARE (Continued)

Unaudited pro forma basic and diluted net loss per share attributable to common stockholders were calculated as follows:

	Year Ended December 31, 2016 (unaudited)
Numerator:	
Net loss	$ (33,167)
Change in fair value of preferred stock warrant liability	(122)
Proforma net loss attributable to common stockholders	$ (33,289)
Denominator:	
Weighted average common shares outstanding—basic and diluted	6,153,300
Proforma adjustment to reflect assumed automatic conversion of convertible preferred stock upon the closing of the proposed initial public offering	72,525,376
Proforma weighted average common shares outstanding—basic and diluted	78,678,676
Proforma net loss per share attributable to common stockholders—basic and diluted	$ (0.42)

14. COMMITMENTS AND CONTINGENCIES

Leases—The Company entered into a three-year lease agreement for its new headquarters on September 30, 2013, with a commencement date of February 1, 2014. As part of the terms of the lease agreement, the landlord agreed to fund certain improvements to the Company's facility. The amount funded by the landlord was $78 and has been recorded as a liability which is being amortized as a reduction of rent expense over the term of the lease.

On June 30, 2016, the lease was amended to extend the term from January 31, 2017 to January 31, 2019. In connection with the lease agreement, the Company issued a letter of credit to the landlord for $84. The Company secured the letter of credit using restricted cash for the full amount of the letter. The restricted cash as of December 31, 2015 and 2016 is included in other noncurrent assets in the accompanying balance sheets.

Total rent expense for the lease for the years ended December 31, 2015 and 2016, which is recorded on a straight-line basis, was $321 and $338, respectively.

At December 31, 2016, future minimum commitments due under the lease are as follows:

Year Ending December 31,	
2017	$ 396
2018	410
2019	34
2020	—
Total minimum lease payments	$ 840

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

14. COMMITMENTS AND CONTINGENCIES (Continued)

License Agreement—In 2009, the Company entered into an exclusive license agreement with The Johns Hopkins University ("JHU"), as amended in November 2012, May 2014, August 2014 and October 2014, which licensed to the Company a portfolio of specified patent rights and remains in full force and effect. Pursuant to the terms of the agreement, as amended, the Company agreed to pay an initial license fee, minimum annual payments beginning in 2017, certain development and commercial milestone payments, royalties on product sales and reimburse all or a portion of the costs associated with the preparation, filing, prosecution and maintenance of the agreed-upon patents and patent applications to JHU ("Prosecution Costs").

After 2016 and until the first commercial sale of product, the minimum annual payment will be $38. If the Company achieves the first commercial sale of the product in the United States, European Union, or Japan, the annual minimum payment will increase to $113. The Company is obligated to pay JHU low single-digit running royalties based upon a percentage of net sales of the licensed products. The Company also has an obligation to pay JHU certain one-time development and commercial milestone payments.

The Company recorded research and development expenses related to the JHU agreement of $152 and $169 for the years ended December 31, 2015 and 2016, respectively.

In 2015, the Company entered into a non-exclusive license agreement with Massachusetts Eye and Ear Infirmary ("MEEI"), which licensed to the Company a certain questionnaire called "Symptom Assessment in Dry Eye" for use in its clinical trials. Pursuant to the terms of the agreement, the Company agreed to pay an initial license fee of $10. Beginning in 2016, the Company was also obligated to pay an annual payment of $5. The agreement terminates in 2018.

The Company's minimum obligations due under its license agreements as of December 31, 2016, are as follows:

Year Ending December 31,	
2017	$ 43
2018	43
2019	38
2020	—
Total minimum license payments	$ 124

Litigation—The Company is not currently subject to any material legal proceedings.

Guarantees and Indemnifications—The Company's Certificate of Incorporation authorizes the Company to indemnify and advance expenses to its officers and directors and agents to the fullest extent permitted by law. The Company leases office space under a non-cancelable operating lease. Under the lease the Company is required to indemnify the landlord against claims, actions, or damages incurred in connection with, among other items, the Company's occupancy and use of the premises.

The Company's equity agreements and certain other arrangements include standard indemnifications against claims, actions, or other matters that may arise in connection with these arrangements.

KALA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

(Amounts in thousands, except share and per share amounts)

14. COMMITMENTS AND CONTINGENCIES (Continued)

As of December 31, 2015 and 2016, the Company had not experienced any losses related to these indemnification obligations, and no claims with respect thereto were outstanding. The Company does not expect significant claims related to these indemnification obligations and has no amount accrued related to these contingencies. The Company does not expect these indemnifications to have a material adverse effect on these financial statements.

15. DEFINED CONTRIBUTION PLAN

The Company has a 401(k) defined contribution plan (the "401(k) Plan") for substantially all of its employees. Eligible employees may make pretax contributions to the 401(k) Plan up to statutory limits.

In January 2017, the Board approved a discretionary matching contribution to be made under the 401(k) Plan in an amount equal to 50% of the first 2% of compensation contributed to the 401(k) Plan by each participant. The Company did not make any matching contributions to the 401(k) Plan through December 31, 2016.

16. RELATED PARTIES

The Company has engaged in the following related-party transactions:

A founder, who is also a stockholder and director, serves as a consultant to the Company. The individual is employed by a university, which has no relationship to the Company. The Company paid the individual $60 in each of 2015 and 2016 for the consulting services which are included in research and development expense in the accompanying statements of operations.

17. SUBSEQUENT EVENTS

The Company evaluated subsequent events through March 30, 2017, the date on which the December 31, 2016 financial statements were issued.

Shares

Common Stock

Prospectus

J.P. Morgan **BofA Merrill Lynch**

Wells Fargo Securities

Wedbush PacGrow

, 2017

Until , 2017 (25 days after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth 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 the Registrant. All amounts are estimates except the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, Inc., filing fee and the NASDAQ Global Market initial listing fee.

	Amount
Securities and Exchange Commission registration fee	$ *
Financial Industry Regulatory Authority, Inc. filing fee	*
NASDAQ Global Market initial listing fee	*
Accountant's 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 its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation that will be effective upon the closing of this offering provides that no director shall be personally liable to us or our 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 and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the Court of Chancery or such other court shall deem proper.

Our certificate of incorporation that will be effective upon the closing of the offering provides that 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, whether civil, criminal, administrative or investigative (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, our 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 certificate of incorporation that will be effective upon the closing of the offering also provides 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, our 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 by him or her or on his or her behalf in connection therewith. If we do not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

In addition, we have entered into indemnification agreements with certain of our directors, and we intend to enter into indemnification agreements with all of our directors prior to the completion of this offering. In general, these agreements provide that we will indemnify the director to the fullest extent permitted by law for claims arising in his or her capacity as a director of our company or in connection with their service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director makes a claim for indemnification and establish certain presumptions that are favorable to the director.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

The underwriting agreement we will enter into in connection with the offering of common stock being registered hereby provides that the underwriters will indemnify, under certain conditions, our directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Insofar as the foregoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act of 1933, as amended, or the Securities Act, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of our common stock, shares of our preferred stock, warrants to purchase shares of our preferred stock and stock options granted by us within the past three years that were not registered under the Securities Act. Also included is the consideration, if any, received by us for such shares and options and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

(a) Issuances of Stock

In April 2014, we issued and sold 15,624,999 shares of our Series B preferred stock to 17 investors at a price per share of $1.44 for an aggregate purchase price of $22.5 million.

In August 2015, we issued and sold 4,629,629 shares of our Series B-1 preferred stock to one investor at a price per share of $1.512 for an aggregate purchase price of $7.0 million.

In April 2016, we issued and sold 42,782,688 shares of our Series C preferred stock to 25 investors a price per share of $1.5876 for an aggregate purchase price of $67.9 million.

No underwriters were involved in the foregoing issuances of securities. The securities described in this section (a) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act and Regulation D thereunder relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All purchasers of shares of our preferred stock described above represented to us in connection with their purchase that they were accredited investors and were acquiring the securities for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time. The purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration statement or an available exemption from such registration.

(b) Stock Option Grants

Between February 28, 2014 and February 28, 2017, we granted options to purchase an aggregate of 15,530,997 shares of common stock, with exercise prices ranging from $0.44 to $1.00 per share, to our employees, directors, advisors and consultants pursuant to our 2009 Employee, Director and Consultant Equity Incentive Plan. As of December 31, 2016, 928,300 options to purchase shares of our common stock had been exercised for aggregate consideration of $108,405, options to purchase 1,093,393 shares had been forfeited and options to purchase 16,643,128 shares of our common stock remained outstanding at a weighted-average exercise price of $0.62.

The stock options and the common stock issuable upon the exercise of such options as described in this section (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with the Registrant's employees, directors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act, or pursuant to Section 4(a)(2) under the Securities Act, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All recipients either received adequate information about the Registrant or had access, through employment or other relationships, to such information.

(c) Issuance of Warrants

In April and November 2014 and July 2015, we issued warrants to purchase an aggregate of 972,222 shares of our Series B preferred stock at a price of $1.44 per share to holders of $5 million in convertible promissory notes issued in December 2013 and lenders under our 2014 Debt Facility.

In October 2016, we issued warrants to purchase up to an aggregate of 251,951 of our Series C preferred stock at a price of $1.59 per share to lenders under our 2014 Debt Facility. These warrants are only exercisable upon our draw down of some or all of the remaining $10.0 million under our 2014 Debt facility.

The issuance of these warrants was made in reliance on the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. The investor represented that it was an accredited investor and was acquiring the warrants for its own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the warrants for an indefinite period of time and appropriate legends were affixed to the instruments representing such warrants issued in such transactions. Such recipients either received adequate information about us or had, through their relationships with us, access to such information.

All of the foregoing securities described in sections (a), (b) and (c) of Item 15 are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued shares of capital stock 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.

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on this day of , 2017.

KALA PHARMACEUTICALS, INC.

By: _____

Mark Iwicki
Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Kala Pharmaceuticals, Inc., hereby severally constitute and appoint Mark Iwicki, Charles McDermott and Mary Reumuth, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for her or him and in her or his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any other registration statement for the same offering pursuant to Rule 462(b) 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, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

Signature	Title	Date
_____ Mark Iwicki	Chief Executive Officer and Chairman of Board of Directors (Principal Executive Officer)	, 2017
_____ Mary Reumuth	Senior Vice President, Finance and Corporate Controller (Principal Financial and Accounting Officer)	, 2017
_____ Kevin Bitterman, Ph.D.	Director	, 2017

Signature	Title	Date
Gregory Grunberg, M.D.	Director	, 2017
Robert Langer, Sc.D.	Director	, 2017
Robert Paull	Director	, 2017
Howard Rosen	Director	, 2017
Rajeev Shah	Director	, 2017
Robert Tepper, M.D.	Director	, 2017
Chen Yu, M.D.	Director	, 2017

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
1.1*	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant
3.2**	Bylaws of the Registrant
3.3*	Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4*	Amended and Restated By-laws of the Registrant (to be effective upon the closing of this offering)
4.1*	Specimen Stock Certificate evidencing the shares of common stock
4.2	Third Amended and Restated Registration Rights Agreement of the Registrant
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
10.1**	2009 Stock Incentive Plan, as amended
10.2**	Form of Stock Option Agreement under the 2009 Employee, Director and Consultant Equity Incentive Plan
10.4*	2017 Stock Incentive Plan
10.5*	Form of Incentive Stock Option Agreement under 2017 Employee, Director and Consultant Equity Incentive Plan
10.6*	Form of Non-statutory Stock Option Agreement under 2017 Stock Incentive Plan
10.7**†	Exclusive License Agreement, dated November 10, 2009, by and between the Registrant and The Johns Hopkins University, as amended
10.8**†	Settlement and License Agreement, dated October 24, 2014, by and between the Registrant and GrayBug, LLC
10.9	Lease Agreement, dated September 30, 2013, by and between the Registrant and ARE-MA Region No. 9 LLC, as amended
10.10	Loan and Security Agreement, dated November 20, 2014, by and between the Registrant and Square 1 Bank, as amended
10.11	Amended and Restated Letter Agreement, dated September 10, 2015, by and between the Registrant and Mark Iwicki
10.12	Amended and Restated Letter Agreement, dated August 19, 2014, by and between the Registrant and Hongming Chen
10.13	Amended and Restated Letter Agreement, dated May 10, 2016, by and between the Registrant and Kim Brazzell
10.14*	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors
23.1*	Consent of Deloitte & Touche LLP
23.2*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
24.1*	Power of Attorney (included on signature page)

* To be filed by amendment.

** Previously filed.

† Confidential treatment requested as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

Exhibit 3.1

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

KALA PHARMACEUTICALS, INC.

Kala Pharmaceuticals, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies as follows:

1) The name of the Corporation is Kala Pharmaceuticals, Inc. The Corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on July 7, 2009 under the name Hanes Newco, Inc.

2) This Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 141, 144, 228, 242 and 245 of the General Corporation Law of the State of Delaware and restates, integrates and further amends the provisions of the Corporation's Amended and Restated Certificate of Incorporation, as amended to date.

3) The text of the Amended and Restated Certificate of Incorporation, as amended to date, is hereby amended and restated in its entirety as set forth in Exhibit A attached hereto.

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by its Chief Executive Officer this 5th day of April, 2016.

KALA PHARMACEUTICALS, INC.

By: /s/ Mark Iwicki
Mark Iwicki
Chief Executive Officer

Exhibit A

ARTICLE I

The name of the corporation is Kala Pharmaceuticals, Inc. (the "**Corporation**").

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 901 N. Market Street, Suite 705, in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is Delaware Corporate Services Inc.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV

The total number of shares of capital stock which the Corporation shall have authority to issue is Two Hundred Seventy-Nine Million Eight Hundred Thirty-Two Thousand Three Hundred Fifty-Eight (279,832,358), of which (i) One Hundred Sixty-Nine Million Eight Hundred Thirty-Two Thousand Three Hundred Fifty-Eight (169,832,358) shares shall be preferred stock, par value $0.001 per share (the "**Preferred Stock**"), and (ii) One Hundred Ten Million (110,000,000) shares shall be common stock, par value $0.001 per share (the "**Common Stock**").

The voting powers, designations, preferences, powers and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions of each class and series of capital stock of the Corporation, shall be as provided in this Article IV; provided that subject to any vote expressly required by this Amended and Restated Certificate of Incorporation and solely to the extent necessary to effect the provisions of Section A.5A of this Article IV, authority is hereby expressly granted to the Board of Directors of the Corporation from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issue of the shares thereof and by filing a certificate of designations relating thereto in accordance with the General Corporation Law of the State of Delaware, to determine and fix the number of shares of such series and such voting powers, designations, preferences, powers and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, all to the full extent now or hereafter permitted by the General Corporation Law of the State of Delaware. Without limiting the generality of the foregoing and subject to (i) the rights of any series of Preferred Stock then outstanding and (ii) Section A.5A.3 of this Article IV, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to the Preferred Stock of any other series solely to the extent deemed necessary in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors, to accomplish the intent of clauses (i) and (ii) of Section A.5A.1 and to the extent permitted by law.

A. CONVERTIBLE PREFERRED STOCK

1. Designation. A total of Eleven Million Three Hundred Twenty-Three Thousand Two Hundred Nine (11,323,209) shares of the Corporation's Preferred Stock shall be designated as a series known as Seed Preferred Stock, par value $0.001 per share (the "**Seed Preferred Stock**"), a total of Nine Million Five Hundred and Eighty-Three Thousand Four Hundred and Thirty-Two (9,583,432) shares of the Corporation's Preferred Stock shall be designated as a series known as Series A Preferred Stock, par value $0.001 per share (the "**Series A Preferred Stock**"), a total of Sixteen Million Five Hundred Ninety Seven Thousand Two Hundred Twenty-One (16,597,221) shares of the Corporation's Preferred Stock shall be designated as a series known as Series B Preferred Stock, par value $0.001 per share (the "**Series B Preferred Stock**"), a total of Four Million Six Hundred Twenty-Nine Thousand Six Hundred Twenty-Nine (4,629,629) shares of the Corporation's Preferred Stock shall be designated as a series known as Series B-1 Preferred Stock, par value $0.001 per share (the "**Series B-1 Preferred Stock**"), and a total of Forty-Two Million Seven Hundred Eighty-Two Thousand Six Hundred Eighty-Eight (42,782,688) shares of the Corporation's Preferred Stock shall be designated as a series known as Series C Preferred Stock, par value $0.001 per share (the "**Series C Preferred Stock**").

2. Voting.

(a) Election of Directors. The holders of outstanding shares of Preferred Stock, voting together as a single class, shall be entitled to elect six (6) Directors of the Corporation (the "**Preferred Directors**"). Each Preferred Director shall be elected by the holders of a majority of the outstanding shares of Preferred Stock, voting together as a single class. The election of the Preferred Directors shall occur (i) at the annual meeting of holders of capital stock, (ii) at any special meeting of holders of capital stock if such meeting is called for the purpose of electing directors, (iii) at any special meeting of holders of Preferred Stock called by holders of a majority of the outstanding shares of Preferred Stock or (iv) by the written consent of holders of a majority of the outstanding shares of Preferred Stock, voting together as a single class. If at any time when any share of Preferred Stock is outstanding any Preferred Director should cease to be a Director for any reason, the vacancy shall only be filled by the vote or written consent of the holders of a majority of the outstanding shares of Preferred Stock, voting together as a single class, in the manner and on the basis specified above or as otherwise provided by law. Subject to Section B.1 below, the holders of outstanding shares of Preferred Stock shall also be entitled to vote in the election of any other Directors of the Corporation, together with the holders of outstanding shares of Common Stock, voting together as a single class (the "**Additional Directors**"). The Additional Directors shall be elected by the holders of a majority of the outstanding shares of Preferred Stock and Common Stock, voting together as a single class. The holders of outstanding shares of Preferred Stock may, in their sole discretion, determine not to elect one or more Preferred Directors as provided herein from time to time, and during any such period the Board of Directors of the Corporation shall not be deemed unduly constituted solely as a result of such vacancy.

(b) Voting Generally. Each outstanding share of Preferred Stock shall be entitled to a number of votes equal to the number of shares of Common Stock into which

such share of Preferred Stock is then convertible pursuant to Section A.5 hereof as of the record date for the vote or written consent of stockholders, if applicable. Each holder of outstanding shares of Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the by-laws of the Corporation and shall vote with holders of the Common Stock, voting together as single class, upon all matters submitted to a vote of stockholders, excluding those matters required to be submitted to a class or series vote pursuant to the terms hereof (including, without limitation, Section A.7) or by law.

3. Dividends.

(a) The holders of shares of Preferred Stock shall be entitled to receive, when, as and if declared by the Board of Directors of the Corporation, out of funds legally available therefor, dividends on a *pari passu* basis and otherwise in the manner set forth herein.

(i) Each share of Seed Preferred Stock issued pursuant to that certain Seed Preferred Stock Purchase Agreement, dated as of December 11, 2009 (the "**Seed Purchase Agreement**"), by and among the Corporation and each of the investors listed on Schedule A thereto, shall accrue dividends at the rate of 8% of the Seed Original Issue Price (as defined below) per share of Seed Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after December 11, 2009, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(ii) Each share of Seed Preferred Stock issued pursuant to that certain Amendment No. 1 to the Seed Purchase Agreement, dated as of October 26, 2010, and any exchange agreement entered into on February 28, 2012 shall accrue dividends at the rate of 8% of the Seed Original Issue Price per share of Seed Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) as if such share had actually been issued and began accruing dividends from and after October 26, 2010, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(iii) Each share of Seed Preferred Stock issued pursuant to that certain Amendment No. 2 to the Seed Purchase Agreement, dated on or about February 28, 2012, shall accrue dividends at the rate of 8% of the Seed Original Issue Price per share of Seed Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after the date of issuance of such share, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(iv) Each share of Series A Preferred Stock issued pursuant to that certain Series A Preferred Stock Purchase Agreement, dated on or about February 14, 2013, by and among the Corporation and the other parties thereto, shall accrue dividends at the rate of 8% of the Series A Original Issue Price (as defined below) per share of Series A Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after the date of issuance of such share, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(v) Each share of Series B Preferred Stock issued pursuant to that certain Series B Preferred Stock Purchase Agreement, dated April 16, 2014, by and among the Corporation and the other parties thereto, shall accrue dividends at the rate of 8% of the Series B Original Issue Price (as defined below) per share of Series B Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after the date of issuance of such share, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(vi) Each share of Series B-1 Preferred Stock issued pursuant to that certain Series B-1 Preferred Stock Purchase Agreement, dated August 13, 2015, by and among the Corporation and the other party thereto, shall accrue dividends at the rate of 8% of the Series B-1 Original Issue Price (as defined below) per share of Series B-1 Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after the date of issuance of such share, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

(vii) Each share of Series C Preferred Stock issued pursuant to that certain Series C Preferred Stock Purchase Agreement, dated on or about the Filing Date (as defined below), by and among the Corporation and the other parties thereto (as amended and/or restated from time to time, the "**Series C Purchase Agreement**"), shall accrue dividends at the rate of 8% of the Series C Original Issue Price (as defined below) per share of Series C Preferred Stock per annum (as adjusted for subsequent stock dividends, stock splits, combinations, recapitalizations or the like with respect to such share) from and after the date of issuance of such share, up to the maximum hereafter provided, prior and in preference to any declaration or payment of any cash dividend on the Common Stock of the Corporation.

Notwithstanding anything to the contrary set forth herein, any such dividends shall be payable only when, as and if declared by the Board of Directors of the Corporation, and the Corporation shall be under no obligation to pay any such dividends. When, as and if declared by the Board of Directors of the Corporation,

any such dividends shall not be cumulative and shall be distributed among the holders of Preferred Stock *pro rata* based on the number of shares of Common Stock held by each, determined on an as-if-converted basis (assuming full conversion of all such Preferred Stock).

(b) After the foregoing dividends on the Preferred Stock shall have been paid, then the Corporation may (when, as and if declared by the Board of Directors of the Corporation) declare and distribute in such year dividends among the holders of Preferred Stock and the holders of Common Stock *pro rata* based on the number of shares of Common Stock held by each, determined on an as-if-converted basis (assuming full conversion of all such Preferred Stock) as of the record date with respect to the declaration of such dividends.

4. Liquidation; Merger, etc.

(a) Preferred Liquidation Preference. Upon any liquidation, dissolution or winding up of the Corporation and its subsidiaries, whether voluntary or involuntary (a "**Liquidation Event**"):

(i) Each holder of outstanding shares of Series C Preferred Stock shall be entitled to be paid in cash, before any amount shall be paid or distributed to the holders of Series B Preferred Stock, Series B-1 Preferred Stock, Series A Preferred Stock, Seed Preferred Stock or Common Stock or any other capital stock ranking on liquidation junior to the Series C Preferred Stock (the Common Stock and such other capital stock being referred to collectively as the "**Series C Junior Stock**"), an amount per share of Series C Preferred Stock equal to the greater of (1) $1.5876 (the "**Series C Original Issue Price**"), plus an amount equal to all declared but unpaid dividends on such share of Series C Preferred Stock or (2) such amount per share as would have been payable had all shares of each series of Preferred Stock that would receive a greater amount upon conversion to Common Stock than pursuant to clause (1) of Subsection 4(a)(i), (ii) or (iii), as applicable, been converted into Common Stock pursuant to Section 5(a) immediately prior to such liquidation, dissolution, winding up or Liquidation Event (such amounts to be adjusted appropriately for stock splits, stock dividends, combinations, recapitalizations and the like) (such greater amount, the "**Series C Preference Amount**"). If the amounts available for distribution by the Corporation to holders of Series C Preferred Stock upon a Liquidation Event are not sufficient to pay the aggregate Series C Preference Amount due to such holders, such holders of Series C Preferred Stock shall share ratably in any distribution in connection with such Liquidation Event in proportion to the full respective preferential amounts to which they are entitled.

(ii) After the prior payment in full of the Series C Preference Amount in connection with a Liquidation Event, each holder of outstanding shares of Series B Preferred Stock and Series B-1 Preferred Stock shall be entitled to be paid in cash, on a *pari passu* basis and before any amount shall be paid or

distributed to the holders of Series A Preferred Stock, Seed Preferred Stock or Common Stock or any other capital stock ranking on liquidation junior to the Series B Preferred Stock and Series B-1 Preferred Stock, an amount per share of Preferred Stock equal to the greater of (1)(A) in the case of Series B Preferred Stock, $1.44 (the "**Series B Original Issue Price**") and (B) in the case of Series B-1 Preferred Stock, $1.512 (the "**Series B-1 Original Issue Price**"), plus, in each case, an amount equal to all declared but unpaid dividends on such share of Preferred Stock or (2) such amount per share as would have been payable had all shares of each series of Preferred Stock that would receive a greater amount upon conversion to Common Stock than pursuant to clause (1) of Subsection 4(a)(i), (ii) or (iii), as applicable, been converted into Common Stock pursuant to Section 5(a) immediately prior to such liquidation, dissolution, winding up or Liquidation Event (such amounts to be adjusted appropriately for stock splits, stock dividends, combinations, recapitalizations and the like) (such greater amount, the "**Series B/B-1 Preference Amount**"). If the amounts available for distribution by the Corporation to holders of Series B Preferred Stock and Series B-1 Preferred Stock upon a Liquidation Event are not sufficient to pay the aggregate Series B/B-1 Preference Amount due to such holders, such holders of Series B Preferred Stock and Series B-1 Preferred Stock shall share ratably in any distribution in connection with such Liquidation Event in proportion to the full respective preferential amounts to which they are entitled.

(iii) After the prior payment in full of the Series C Preference Amount and the Series B/B-1 Preference Amount in connection with a Liquidation Event, each holder of outstanding shares of Seed Preferred Stock and Series A Preferred Stock shall be entitled to be paid in cash, on a *pari passu* basis and before any amount shall be paid or distributed to the holders of the Common Stock or any other capital stock ranking on liquidation junior to the Seed Preferred Stock and Series A Preferred Stock, an amount per share of Preferred Stock equal to the greater of (1)(A) in the case of the Seed Preferred Stock, $1.00 (the "**Seed Original Issue Price**"), and (B) in the case of the Series A Preferred Stock, $1.20 (the "**Series A Original Issue Price**"), plus, in each case, an amount equal to all declared but unpaid dividends on such share of Preferred Stock or (2) such amount per share as would have been payable had all shares of each series of Preferred Stock that would receive a greater amount upon conversion to Common Stock than pursuant to clause (1) of Subsection 4(a)(i), (ii) or (iii), as applicable, been converted into Common Stock pursuant to Section 5(a) immediately prior to such liquidation, dissolution, winding up or Liquidation Event (such amounts to be adjusted appropriately for stock splits, stock dividends, combinations, recapitalizations and the like) (such greater amount, the "**Series A/Seed Preference**

Amount"). If the amounts available for distribution by the Corporation to holders of Seed Preferred Stock and Series A Preferred Stock upon a Liquidation Event are not sufficient to pay the aggregate Series A/Seed Preference Amount due to such holders, such holders of Seed Preferred Stock and Series A Preferred Stock shall share ratably in any distribution in connection with

such Liquidation Event in proportion to the full respective preferential amounts to which they are entitled.

(iv) After the prior payment in full of the Series C Preference Amount, the Series B/B-1 Preference Amount and the Series A/Seed Preference Amount in connection with a Liquidation Event in accordance with Sections A.4(a)(i)-(iii) above, the remaining assets and funds of the Corporation available for distribution to its stockholders, if any, shall be distributed among the holders of shares of Common Stock then outstanding.

(b) Amount Payable in Mergers, etc. Each of the following events shall be deemed to be a Liquidation Event (each, a "**Deemed Liquidation Event**"): (i) any merger or consolidation of the Corporation into or with another corporation (except one in which the holders of capital stock of the Corporation immediately prior to such merger or consolidation continue to hold at least a majority of the voting power of the capital stock of the surviving or resulting corporation or if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation), (ii) any sale of all or substantially all of the assets of the Corporation or (iii) any exclusive license of substantially all of the intellectual property of the Corporation (except in the case of clause (ii) or (iii), a sale or exclusive license to a wholly owned subsidiary of the Corporation). Upon an occurrence of a Deemed Liquidation Event, all consideration payable to the stockholders of the Corporation in connection with such Deemed Liquidation Event that is a merger or a consolidation, or all consideration payable to the Corporation and distributable to its stockholders, together with all other available assets of the Corporation (net of obligations owed by the Corporation that are senior to the Preferred Stock) in connection with such Deemed Liquidation Event that is an asset sale or an exclusive license, shall be, as applicable, paid by the purchaser or the licensee, as applicable, to the holders of, or distributed by the Corporation in redemption (out of funds legally available therefor) of, any Series C Preferred Stock and any Series C Junior Stock in accordance with the preferences and priorities set forth in Section A.4(a) above, with such preferences and priorities specifically intended to be applicable in any such merger, consolidation, asset sale or exclusive license, as if such transaction were a Liquidation Event. In furtherance of the foregoing, the Corporation shall take such actions as are necessary to give effect to the provisions of this Section A.4(b), including, without limitation, (i) in the case of a merger or a consolidation, causing the definitive agreement relating to such merger or consolidation to provide for a rate at which the shares of Preferred Stock are converted into or exchanged for cash, new securities or other property which gives effect to the preferences and priorities set forth in Section A.4(a), or (ii) in the case of an asset sale or an exclusive license, redeeming the Preferred Stock. The Corporation shall promptly provide to the holders of shares of Preferred Stock such information concerning the terms of such merger, consolidation or asset sale, and the value of the assets of the Corporation as may reasonably be requested by the holders of Preferred Stock. The amount deemed distributed to the holders of Preferred Stock upon any such transaction shall be the cash or the value of the property, rights or

securities distributed to such holders by the Corporation or the acquiring person, firm or other entity, as applicable.

(c) Valuation of Securities or Other Non-Cash Consideration. For purposes of valuing any securities or other noncash consideration to be delivered to the holders of the Preferred Stock in connection with any transaction to which this Section A.4 is applicable, the following shall apply:

(i) If any such securities are traded on a nationally recognized securities exchange or inter-dealer quotation system, the value shall be deemed to be the average of the closing prices of such securities on such exchange or system over the 30-day period ending three (3) business days prior to the closing;

(ii) If any such securities are traded over-the-counter, the value shall be deemed to be the average of the closing bid prices of such securities over the 30-day period ending three (3) business days prior to the closing; and

(iii) If there is no active public market for such securities or other noncash consideration, the value shall be the fair market value thereof, as mutually determined in good faith by the Board of Directors of the Corporation, acting through a committee of the Board of Directors of the Corporation consisting of all of the Directors other than the Preferred Directors (an "**Independent Committee**"), and the holders of at least 67% of the voting power of the outstanding shares of Preferred Stock, voting together as a single class, on an as-converted basis (a "**Majority Interest**"), provided that if such Independent Committee and the holders of a Majority Interest are unable to reach agreement, then by independent appraisal by a mutually agreed to investment banker, the fees of which shall be paid by the Corporation.

(d) Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event, if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the definitive agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Sections A.4(a)(i)-(iv) above as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections A.4(a)(i)-(iv) above after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the avoidance of doubt, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

5. Conversion. Shares of Preferred Stock shall be converted into Common Stock in accordance with the following:

(a) Voluntary Conversion. Each holder of shares of Preferred Stock may convert such shares into Common Stock at any time after the date of issuance of such shares of Preferred Stock as follows:

(i) Upon the written election of the holder thereof and without payment of any additional consideration, each outstanding share of Seed Preferred Stock held by such holder shall be converted into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (A) the Seed Original Issue Price by (B) the Seed Conversion Price at the time in effect for such Seed Preferred Stock (such quotient, the "**Seed Conversion Rate**"). The "**Seed Conversion Price**" per share for shares of Seed Preferred Stock is currently the Seed Original Issue Price, subject to adjustment as set forth in Section A.6. Any election by a holder of Seed Preferred Stock pursuant to this Section A.5(a)(i) shall be made by written notice to the Corporation, and such notice may be given at any time and from time to time after the Filing Date (as defined below).

(ii) Upon the written election of the holder thereof and without payment of any additional consideration, each outstanding share of Series A Preferred Stock held by such holder shall be converted into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (A) the Series A Original Issue Price by (B) the Series A Conversion Price at the time in effect for such Series A Preferred Stock (such quotient, the "**Series A Conversion Rate**"). The initial "**Series A Conversion Price**" per share for shares of Series A Preferred Stock shall be the Series A Original Issue Price, subject to adjustment as set forth in Section A.6. Any election by a holder of Series A Preferred Stock pursuant to this Section A.5(a)(ii) shall be made by written notice to the Corporation, and such notice may be given at any time and from time to time after the Filing Date.

(iii) Upon the written election of the holder thereof and without payment of any additional consideration, each outstanding share of Series B Preferred Stock held by such holder shall be converted into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (A) the Series B Original Issue Price by (B) the Series B Conversion Price at the time in effect for such Series B Preferred Stock (such quotient, the "**Series B Conversion Rate**"). The initial "**Series B Conversion Price**" per share for shares of Series B Preferred Stock shall be the Series B Original Issue Price, subject to adjustment as set forth in Section A.6. Any election by a holder of Series B Preferred Stock pursuant to this Section A.5(a)(iii) shall be made by written notice to the Corporation, and such notice may be given at any time and from time to time after the Filing Date.

(iv) Upon the written election of the holder thereof and without payment of any additional consideration, each outstanding share of Series B-1 Preferred Stock held by such holder shall be converted into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (A) the Series B-1 Original Issue Price by (B) the Series B-1 Conversion Price at the time in effect for such Series B-1 Preferred Stock (such quotient, the "**Series B-1 Conversion Rate**"). The initial "**Series B-1 Conversion Price**" per share for shares of Series B-1 Preferred Stock shall be the Series B-1 Original Issue Price, subject to adjustment as set forth in Section A.6. Any election by a holder of Series B-1 Preferred Stock pursuant to this Section A.5(a)(iv) shall be made by written notice to the Corporation, and such notice may be given at any time and from time to time after the Filing Date.

(v) Upon the written election of the holder thereof and without payment of any additional consideration, each outstanding share of Series C Preferred Stock held by such holder shall be converted into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (A) the Series C Original Issue Price by (B) the Series C Conversion Price at the time in effect for such Series C Preferred Stock (such quotient, the "**Series C Conversion Rate**"). The initial "**Series C Conversion Price**" per share for shares of Series C Preferred Stock shall be the Series C Original Issue Price, subject to adjustment as set forth in Section A.6. Any election by a holder of Series C Preferred Stock pursuant to this Section A.5(a)(v) shall be made by written notice to the Corporation, and such notice may be given at any time and from time to time after the Filing Date. The Seed Conversion Price, the Series A Conversion Price, the Series B Conversion Price, the Series B-1 Conversion Price and the Series C Conversion Price are sometimes referred to herein as the applicable "**Conversion Price**."

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted, without the payment of any additional consideration, into fully paid and nonassessable shares of Common Stock at the Seed Conversion Rate, Series A Conversion Rate, Series B Conversion Rate, Series B-1 Conversion Rate, or Series C Conversion Rate, as applicable, upon the earlier of (i) the closing of the Corporation's first underwritten public offering on a firm commitment basis by a nationally recognized investment banking organization or organizations pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "**Securities Act**"), covering the offer and sale of Common Stock (A) at a price per share of Common Stock of not less than $12.50 (appropriately adjusted for stock splits, stock dividends, combinations, recapitalizations, and the like), (B) in which the Corporation receives aggregate gross proceeds attributable to sales for the account of the Corporation of not less than $30,000,000, and (C) with respect to which such Common Stock is listed for trading on either the New York Stock Exchange or the NASDAQ Stock Market (a "**QPO**"), or (ii) a date specified by vote or written consent of the holders of a Majority Interest. If a closing of a QPO occurs, all outstanding shares of Preferred Stock shall be

deemed to have been converted into shares of Common Stock immediately prior to such closing.

(c) Procedure for Conversion.

(i) Voluntary Conversion. Upon election to convert pursuant to Section A.5(a)(i), (ii), (iii), (iv),(v) or (vi), the relevant holder or holders of Preferred Stock shall surrender the certificate or certificates representing the Preferred Stock being converted to the Corporation, duly assigned or endorsed for transfer to the Corporation (or accompanied by duly executed stock powers relating thereto) or shall deliver a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the corporation against any claim that may be made against the Corporation on account of any loss, theft or destruction of such certificate, at its principal executive office or such other place as the Corporation may from time to time designate by notice to the holders of the Preferred Stock. Upon surrender of such certificate(s) or delivery of a lost certificate affidavit, the Corporation shall (i) issue and send by hand delivery, by courier or by first class mail (postage prepaid) to the holder thereof or to such holder's designee, at the address designated by such holder, certificates for the number of shares of Common Stock to which such holder shall be entitled upon conversion and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Section A.5(f) in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted. The issuance of certificates for Common Stock upon conversion of Preferred Stock shall be deemed effective as of the date of surrender of such Preferred Stock certificates or delivery of such lost certificate affidavit and will be made without charge to the holders of such shares for any issuance tax in respect thereof or other costs incurred by the Corporation in connection with such conversion and the related issuance of such stock.

(ii) Automatic Conversion. Upon an automatic conversion pursuant to Section A.5(b)(i) or (ii) (the "**Automatic Conversion Date**"), all outstanding shares of Preferred Stock shall be converted into shares of Common Stock without any further action by the holders of such shares and whether or not the certificates representing such shares of Preferred Stock are surrendered to the Corporation. On the Automatic Conversion Date, all rights with respect to the Preferred Stock so converted shall terminate, except any of the rights of the holders thereof upon surrender of their certificate or certificates therefor or delivery of a lost certificate affidavit thereof to receive certificates for the number of shares of Common Stock into which such shares of Preferred Stock have been converted, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section A.5(f) and to receive payment of any declared but unpaid dividends on the Preferred Stock converted. If so required by

the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. Upon surrender of such certificates or lost certificate affidavits, the Corporation shall issue and deliver to such holder, promptly (and in any event in such time as is sufficient to enable such holder to participate in a QPO, if applicable) at such office and in its name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which the shares of the Preferred Stock surrendered are convertible on the Automatic Conversion Date.

(d) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all outstanding shares of Preferred Stock, the Corporation will take such corporate action as may be necessary to increase the number of its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose, and to reserve the appropriate number of shares of Common Stock for issuance upon such conversion.

(e) No Closing of Transfer Books. The Corporation shall not close its books against the transfer of shares of Preferred Stock in any manner that would interfere with the timely conversion of any shares of Preferred Stock.

(f) Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

5A. Special Mandatory Conversion.

5A.1 Trigger Event. In the event that any holder of at least 500,000 shares of Preferred Stock (a "**Major Investor**") does not participate in a Qualified Financing (as defined below) by purchasing in the aggregate, in such Qualified Financing and within the time period specified by the Corporation (provided that the Corporation has sent to such Major Investor at least 10 days written notice (the "**Financing Notice**") of, and the opportunity to purchase its Pro Rata Amount (as defined below) of, the Qualified Financing), such Major Investor's Pro Rata Amount, the Applicable Portion (as defined

below) held by such Major Investor shall automatically, and without any further action on the part of such Major Investor, be converted into shares of a newly created series of Preferred Stock (having such number of shares as is equal to the aggregate number of shares of Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, and Series C Preferred Stock, as applicable, being so converted pursuant to this Section A.5A) effective upon, subject to, and concurrently with, the consummation of the Qualified Financing, which each such newly created series shall be identical in all respects to the Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, or Series C Preferred Stock, as applicable, except that (i) the conversion price of such series shall be fixed at the applicable Conversion Price in effect immediately prior to the consummation of the Qualified Financing and shall not be subject to any further adjustment analogous to that set forth in Section A.6(a) (provided that such newly created series shall remain subject to Sections A.6(a)(v) through (viii)), (ii) such new series shall not include a provision analogous to this Section A.5A and (iii) subject to Section A.5A.3, the terms of such new series may vary from the terms of the Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock, or Series C Preferred Stock, as applicable, solely to the extent deemed necessary in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors, to accomplish the intent of clauses (i) and (ii) of this Section A.5A.1 (each such new series of Preferred Stock, the "**New Preferred Stock**"). The Board of Directors of the Corporation shall take all necessary actions to designate each such series of New Preferred Stock prior to the consummation of each Qualified Financing that would trigger a Special Major Investor Mandatory Conversion (as defined below). For purposes of determining the number of Offered Securities (as defined below) a Major Investor has purchased in a Qualified Financing, all Offered Securities purchased by Affiliates of such Major Investor shall be aggregated with the Offered Securities purchased by such Major Investor (provided that no shares or securities shall be attributed to more than one entity or person within any such group of affiliated entities or persons). Such conversion is referred to as a "**Special Major Investor Mandatory Conversion.**"

5A.2 Procedural Requirements. Upon a Special Major Investor Mandatory Conversion, each Major Investor holding shares of Preferred Stock converted pursuant to Section A.5A.1 shall be sent written notice of such Special Major Investor Mandatory Conversion and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section A.5A. Upon receipt of such notice, each such Major Investor shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. As soon as practicable after the

Special Major Investor Mandatory Conversion and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock so converted, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of New Preferred Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Section A.5(f) in lieu of any fraction of a share of New Preferred Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted and a new certificate for the number of shares, if any, of Preferred Stock represented by such surrendered certificate or certificates and not converted pursuant to Section A.5A.1. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

5A.3 Class Voting Rights. Notwithstanding any other provisions in this Amended and Restated Certificate of Incorporation to the contrary, in the event that one or more series of New Preferred Stock are established, any reference in the terms of the Preferred Stock (or any series thereof) or the New Preferred Stock (or any series thereof) to the rights of the holders thereof to consent, vote or otherwise take action separately as a class shall be deemed to refer to a consent, vote or other action by the holders of the specified percentage of all outstanding shares of the Preferred Stock (or any series thereof, as applicable) and the New Preferred Stock (or any series thereof, as applicable), considered together as a single class.

5A.4 Definitions. For purposes of this Section A.5A, the following definitions shall apply:

5A.4.1 "**Affiliate**" shall mean, with respect to any Major Investor, any person, entity or firm which, directly or indirectly, controls, is controlled by or is under common control with such Major Investor, including, without limitation, any entity of which the Major Investor is a partner or member, any partner, limited partner, officer, director, member or employee of such Major Investor and any venture capital or other investment fund now or hereafter existing of which the Major Investor is a partner or member which is controlled by or under common control with one or more general partners of such Major Investor or shares the same management company or investment advisor with such Major Investor.

5A.4.2 "**Applicable Portion**" shall mean, with respect to any Major Investor, a number of shares of each series of Preferred Stock calculated by multiplying the aggregate number of shares of each series of Preferred Stock held by such Major Investor immediately prior to a Qualified Financing by a fraction, the numerator of which is equal to the amount, if positive, by which such Major Investor's Pro Rata Amount exceeds the number of Offered Securities actually purchased by such Major Investor in such Qualified Financing, and the denominator of which is equal to such Major Investor's Pro Rata Amount, with any resulting fraction of a share of any particular series being rounded down to the nearest whole share.

5A.4.3 "**Offered Securities**" shall mean the Additional Shares of Common Stock (as defined below) set aside by the Board of Directors of the Corporation for purchase by Major Investors in connection with a Qualified Financing, and offered to such Major Investors.

5A.4.4 "**Pro Rata Amount**" shall mean, with respect to any Major Investor, the lesser of (a) a number of Offered Securities calculated by multiplying the aggregate number of Offered Securities by a fraction, the numerator of which is equal to the number of shares of Common Stock issuable upon conversion of the Preferred Stock owned by such Major Investor, and the denominator of which is equal to the aggregate number of outstanding shares of Common Stock issuable upon conversion of the Preferred Stock held by all Major Investors, or (b) the maximum number of Offered Securities that such Major Investor is permitted by the Corporation to purchase in such Qualified Financing, after giving effect to any cutbacks or limitations established by the Board of Directors of the Corporation and applied on a pro rata basis to all Major Investors.

5A.4.5 "**Qualified Financing**" shall mean any transaction involving the issuance or sale of Additional Shares of Common Stock after the Filing Date, except issuances and sales pursuant to the Series C Purchase Agreement, if (A) the holders of a Majority Interest, (B) to the extent required by applicable law or Section A.7(b)(ii), the holders of a majority of the outstanding shares of Series B Preferred Stock and Series B-1 Preferred Stock, voting together as a single class on an as-converted basis (a "**Series B/B-1 Majority Interest**") and (C) to the extent required by applicable law or Section A.7(c)(ii), the holders of a Series C Majority Interest (as defined below), elect, by written notice sent to the Corporation prior to the consummation of the Qualified Financing, that such transaction be treated as a Qualified Financing for purposes of this Section A.5A.

6. Adjustments.

(a) Adjustments to the Conversion Price. Except as provided in Section A.6(b) and except in the case of an event described in Section A.6(c), if and whenever after the date this Amended and Restated Certificate of Incorporation is first filed with the Secretary of State of Delaware (the "**Filing Date**") the Corporation shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued in accordance with this Section A.6(a)), without consideration or for a consideration per share less than the Seed Conversion Price, Series A Conversion Price, Series B Conversion Price, Series B-1 Conversion Price or Series C Conversion Price in effect immediately prior to such issue, then the applicable Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 \times (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "**CP_2**" shall mean the applicable Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;

(b) "**CP_1**" shall mean the applicable Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;

(c) "**A**" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options (as defined below) outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (as defined below) (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "**B**" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "**C**" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

(f) "**Additional Shares of Common Stock**" with respect to a series of Preferred Stock shall mean all shares of Common Stock issued (or deemed issued in accordance with this Section A.6(a)) by the Corporation after the Filing Date, other than shares of Common Stock issued in accordance with Section A.6(b).

For purposes of this Section A.6(a), the following shall also be applicable:

(i) Issuance of Rights or Options. If the Corporation shall, at any time after the Filing Date, in any manner grant (whether directly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such warrants, rights or options being called "**Options**" and such convertible or exchangeable stock or securities being called "**Convertible Securities**"), in each case for consideration per share (determined as provided in this paragraph and in Section A.6(a)(vi)) less than the applicable Conversion Price then in effect, whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options, or upon conversion or exchange

of the total maximum amount of such Convertible Securities issuable upon exercise of such Options, shall be deemed to have been issued as of the date of granting of such Options at a price per share equal to the amount determined by dividing (A) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issuance or sale of such Convertible Securities and upon the conversion or exchange thereof, by (B) the total maximum number of shares of Common Stock deemed to have been so issued. Except as otherwise provided in Section A.6(a)(iii), no adjustment of the applicable Conversion Price shall be made upon the actual issuance of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issuance of such Common Stock upon conversion or exchange of such Convertible Securities.

(ii) Issuance of Convertible Securities. If the Corporation shall, at any time after the Filing Date, in any manner issue or sell any Convertible Securities for consideration per share (determined as provided in this paragraph and in Section A.6(a)(vi)) less than the applicable Conversion Price then in effect, whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued as of the date of the issuance or sale of such Convertible Securities at a price per share equal to the amount determined by dividing (A) the total amount, if any, received or receivable by the Corporation as consideration for the issuance or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (B) the total maximum number of shares of Common Stock deemed to have been so issued; provided, that (1) except as otherwise provided in Section A.6(a)(iii), no adjustment of the applicable Conversion Price shall be made upon the actual issuance of such Common Stock upon conversion or exchange of such Convertible Securities and (2) if any such issuance or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities, no further adjustment of the applicable Conversion Price shall be made by reason of such issuance or sale.

(iii) Change in Option Price or Conversion Rate. If there shall occur a change in (A) the maximum number of shares of Common Stock issuable in connection with any Option referred to in Section A.6(a)(i) or any Convertible Securities referred to in Section A.6(a)(i) or (ii), (B) the purchase price provided for in any Option referred to in Section A.6(a)(i), (C) the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in Section A.6(a)(i) or (ii) or (D) the rate at which Convertible

Securities referred to in Section A.6(a)(i) or (ii) are convertible into or exchangeable for Common Stock (in each case, other than in connection with an event described in Section A.6(b)), then the applicable Conversion Price in effect at the time of such event shall be adjusted to the applicable Conversion Price that would have been in effect at such time had such Options or Convertible Securities that are still outstanding provided for such changed maximum number of shares, purchase price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold, but only if as a result of such adjustment the applicable Conversion Price then in effect is thereby reduced; and on the termination of any such Option or any such right to convert or exchange such Convertible Securities, the applicable Conversion Price then in effect hereunder shall be increased to the applicable Conversion Price that would have been in effect at the time of such termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such termination (*i.e.*, to the extent that fewer than the number of shares of Common Stock deemed to have been issued in connection with such Option or Convertible Securities were actually issued), never been issued or been issued at such higher price, as the case may be.

(iv) Stock Dividends. If the Corporation, at any time or from time to time after the Filing Date, shall declare or make, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or make any other distribution upon any stock of the Corporation payable in Common Stock, Options or Convertible Securities, any Common Stock, Options or Convertible Securities, as the case may be, issuable in payment of such dividend or distribution shall be deemed to have been issued or sold without consideration, and the applicable Conversion Price will be adjusted pursuant to this Section A.6(a); provided, that no adjustment shall be made to the applicable Conversion Price as a result of such dividend or distribution if the holders of the shares of Preferred Stock are entitled to, and do, receive such dividend or distribution in accordance with Section A.3; and, provided, further, that if any adjustment is made to the applicable Conversion Price as a result of the declaration of a dividend and such dividend is not effected, the applicable Conversion Price shall be appropriately readjusted to the applicable Conversion Price in effect had such dividend not been declared.

(v) Other Dividends and Distributions. If the Corporation, at any time or from time to time after the Filing Date, shall declare or make, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities or other property of the Corporation other than shares of Common Stock, then and in each such event provision shall be made so that the holders of the outstanding shares of Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable thereupon, the amount of such other securities of the Corporation or the value of such other property that they would have received had the Preferred Stock been converted into Common Stock on the date of such event

and had such holders thereafter, during the period from the date of such event to and including the conversion date, retained such securities or other property receivable by them during such period giving application to all adjustments called for during such period under Section A.6 with respect to the rights of the holders of the outstanding shares of Preferred Stock; and, provided, further, however, that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

(vi) Consideration for Stock. If the Corporation, at any time or from time to time after the Filing Date, shall issue or sell, or is deemed to have issued or sold, any shares of Common Stock for cash, the consideration received therefor shall be the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest (determined with respect to deemed issuances and sales in connection with Options and Convertible Securities in accordance with clause (A) of Section A.6(a)(i) or Section A.6(a)(ii), as appropriate). In case any shares of Common Stock shall be issued or sold, or deemed issued or sold, for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair market value of such consideration received or to be received by the Corporation (determined with respect to deemed issuances and sales in connection with Options and Convertible Securities in accordance with clause (A) of Section A.6(a)(i) or Section A.6(a)(ii), as appropriate) as determined in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors. In case any Options shall be issued in connection with the issuance and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined in good faith by the Board of Directors of the Corporation, including a majority of the Preferred Directors.

(vii) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (B) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date shall be deemed to be the date of the issuance or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

(viii) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the

account of the Corporation; provided, that the disposition of any such shares shall be considered an issuance or sale of Common Stock for the purpose of this Section A.6.

(ix) Other Issuances or Sales. In calculating any adjustment to the applicable Conversion Price pursuant to this Section A.6(a), any Options or Convertible Securities that provide, as of the effective date of such adjustment, for the issuance upon exercise or conversion thereof of an indeterminable number of shares of Common Stock shall (together with the shares of Common Stock issuable upon exercise or conversion thereof) be disregarded; provided, that at such time as the number of shares of Common Stock issuable upon exercise or conversion of such Options or Convertible Securities becomes determinable, the applicable Conversion Price shall be adjusted as provided in Section A.6(a)(iii) above.

(b) Certain Issues of Common Stock Excepted. Anything herein to the contrary notwithstanding, the Corporation shall not be required to make any adjustment of the applicable Conversion Price in the case of the issuance from and after the Filing Date of (i) shares of Common Stock upon conversion of shares of Preferred Stock; (ii) up to a maximum of 18,404,870 shares (subject to an increase upon the approval of the Board of Directors of the Corporation including a majority of the Preferred Directors and provided that any shares of Common Stock or options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are re-granted as new stock grants (or as new options) pursuant to the terms of the applicable plan, agreement or arrangement) of Common Stock or options therefor to directors, officers, employees or consultants of the Corporation in connection with their service as directors of the Corporation, their employment by the Corporation or their retention as consultants or officers by the Corporation, in each case authorized by the Board of Directors of the Corporation and issued pursuant to the Corporation's 2009 Employee, Director and Consultant Equity Incentive Plan (as amended to the Filing Date, the "2009 Plan"), and any other equity incentive plan or amendment to such 2009 Plan from and after the Filing Date approved by a majority of the Board of Directors of the Corporation including a majority of the Preferred Directors; (iii) shares of Common Stock issued upon exercise of any Options or Convertible Securities outstanding as of the Filing Date; (iv) shares of Common Stock issued as a dividend or distribution on Preferred Stock or pursuant to Section A.6(c); (v) shares of Common Stock issued or issuable to banks, equipment lessors, real estate lessors or other financial institutions pursuant to debt financing or commercial transactions approved by the majority of the Board of Directors of the Corporation including a majority of the Preferred Directors; (vi) shares of Common Stock issued or issuable in connection with technology licenses, strategic alliances, product development agreements or other similar arrangements approved by a majority of the Board of Directors of the Corporation including a majority of the Preferred Directors; (vii) shares of Common Stock issued pursuant to Section A.5(b)(i) or (ii); (viii) shares of Common Stock issued or issuable pursuant to a merger, consolidation, acquisition or

similar business combination approved by a majority of the Board of Directors of the Corporation including a majority of the Preferred Directors; (ix) shares of Series C Preferred Stock issued or issuable pursuant to the Series C Purchase Agreement; and (x) subject to Section A.8(c)(i), shares of Common Stock that are otherwise excluded by a written consent of holders of a Majority Interest ("**Excluded Shares**").

(c) Subdivision or Combination of Common Stock. In case the Corporation shall at any time after the Filing Date subdivide its outstanding shares of Common Stock into a greater number of shares (by any stock split, stock dividend or otherwise), the applicable Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the Corporation shall at any time after the Filing Date combine its outstanding shares of Common Stock into a smaller number of shares (by any reverse stock split or otherwise), the applicable Conversion Price in effect immediately prior to such combination shall be proportionately increased. In the case of any such subdivision, no further adjustment shall be made pursuant to Section A.6(a)(iv) by reason thereof.

(d) Reorganization or Reclassification. If any capital reorganization or reclassification of the capital stock of the Corporation shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such reorganization or reclassification, lawful and adequate provisions shall be made whereby each holder of a share or shares of Preferred Stock shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of the shares of Common Stock immediately theretofore receivable upon the conversion of such share or shares of Preferred Stock, as the case may be, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock immediately theretofore receivable upon such conversion had such reorganization or reclassification not taken place, and in any such case appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions hereof (including, without limitation, provisions for adjustments of the applicable Conversion Price) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise of such conversion rights.

7. Covenants.

(a) Preferred Stock Protective Provisions. The Corporation shall not (by merger, consolidation, amendment or otherwise), without first having obtained the affirmative vote or written consent of the holders of a Majority Interest:

(i) declare or pay any dividends other than dividends on the Preferred Stock as provided in Section A.3 or make any distributions of cash, property or securities of the Corporation in respect of its capital stock, or apply any of its assets to the redemption, retirement, purchase or other acquisition of its

capital stock, directly or indirectly, through subsidiaries or otherwise (other than pursuant to employee or consultant agreements giving the Corporation the right to repurchase shares at the original cost thereof upon the termination of services and provided that such repurchase is approved by the Board of Directors of the Corporation);

(ii) reclassify any capital stock in a manner that adversely affects the designations, preferences, powers, or relative, participating, optional or other special rights of, or the restrictions provided for the benefit of, the Preferred Stock;

(iii) authorize or issue, or obligate itself to issue, any convertible debt or other debt with any equity participation, any securities convertible into or exercisable or exchangeable for any equity securities, or any other equity security, in any case ranking senior to or on parity with the Preferred Stock as to liquidation, sale or merger preferences, redemption, or dividend rights, or with any special voting rights, or permit any subsidiary of the Corporation to issue any capital stock, or securities convertible into or exercisable or exchangeable for capital stock or other securities, of such subsidiary, to any person or entity other than the Corporation;

(iv) except as set forth in the second paragraph of Article IV solely with respect to the creation of New Preferred Stock pursuant to, and in accordance with, Section A.5A, amend, alter or repeal any provision of, or add any provision to, this Amended and Restated Certificate of Incorporation (including, without limitation, increasing or decreasing the total number of shares of Preferred Stock or Common Stock that the Corporation shall have the authority to issue) or the by-laws of the Corporation as in effect on the Filing Date;

(v) effect any Liquidation Event or Deemed Liquidation Event;

(vi) effect the sale, transfer or license of any assets of the Corporation or any subsidiary to any person or entity other than the Corporation or a wholly-owned subsidiary of the Corporation, other than in the ordinary course of business;

(vii) incur indebtedness in excess of $250,000 in the aggregate;

(viii) form any subsidiary;

(ix) adopt any new, or amend any existing, stock plan to increase the aggregate number of shares of Common Stock reserved under such plan or plans to more than 19,333,170 shares of Common Stock in the aggregate, except with the approval of the Board of Directors of the Corporation, including a majority of the Preferred Directors;

(x) change the principal business of the Corporation, enter new lines of business, or exit any existing line of business;

(xi) take any other action not described in Section A.7(a)(i)-(x) if such action would adversely alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Preferred Stock; or

(xii) enter into any agreement to do any of the foregoing that is not expressly made conditional on obtaining the affirmative vote or written consent of a Majority Interest.

(b) Series B Preferred Stock and Series B-1 Preferred Stock Protective Provisions. In addition to and not in limitation of Section A.7(a), the Corporation shall not (by merger, consolidation, amendment or otherwise), without first having obtained the affirmative vote or written consent of the holders of a Series B/B-1 Majority Interest:

(i) amend (A) Section A.5A of this Amended and Restated Certificate of Incorporation or (B) this Amended and Restated Certificate of Incorporation to add any provision that imposes a similar special mandatory conversion on the Series B Preferred Stock and Series B-1 Preferred Stock (other than any special mandatory conversion imposed on the Series B Preferred Stock and Series B-1 Preferred Stock as of the Filing Date or consented to after the Filing Date in accordance with Section A.7(b)(i)(A)); or

(ii) take any other action if such action would adversely alter or adversely change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series B Preferred Stock and Series B-1 Preferred Stock in a manner that does not similarly affect any other class or series of the Corporation's capital stock, provided that, for clarity, the authorization of a new class or series of the Corporation's capital stock that is senior to or on parity with the Series B Preferred Stock or Series B-1 Preferred Stock shall not be deemed to adversely alter or adversely change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series B Preferred Stock or Series B-1 Preferred Stock in a manner that does not similarly affect any other class or series of the Corporation's capital stock.

(c) Series C Preferred Stock Protective Provisions. In addition to and not in limitation of Section A.7(a), the Corporation shall not (by merger, consolidation, amendment or otherwise), without first having obtained the affirmative vote or written consent of the holders of at least a majority of the outstanding shares of Series C Preferred Stock, voting as a single class (a "**Series C Majority Interest**"):

(i) amend (A) Section A.5A of this Amended and Restated Certificate of Incorporation or (B) this Amended and Restated Certificate of Incorporation to add any provision that imposes a similar special mandatory conversion on the Series C Preferred Stock (other than any special mandatory

conversion imposed on the Series C Preferred Stock as of the Filing Date or consented to after the Filing Date in accordance with Section A.7(c)(i)(A)); or

(ii) take any other action if such action would adversely alter or adversely change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series C Preferred Stock in a manner that does not similarly affect any other class or series of the Corporation's capital stock, provided that, for clarity, the authorization of a new class or series of the Corporation's capital stock that is senior to or on parity with the Series C Preferred Stock shall not be deemed to adversely alter or adversely change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series C Preferred Stock in a manner that does not similarly affect any other class or series of the Corporation's capital stock.

8. Notice; Adjustments; Waivers.

(a) Liquidation Events, Etc. In the event (i) the Corporation establishes a record date to determine the holders of any class of securities who are entitled to receive any dividend or other distribution or who are entitled to vote at a meeting (or by written consent) in connection with any of the transactions identified in clause (ii) hereof, or (ii) any Liquidation Event, Deemed Liquidation Event pursuant to Section A.4(b) hereof occurs, vote or written consent pursuant to Section A.5(b)(ii) occurs, or a QPO or any other public offering becomes reasonably likely to occur, the Corporation shall mail or cause to be mailed by first class mail (postage prepaid) to each holder of Preferred Stock at least ten (10) days prior to such record date specified therein or the expected effective date of any such transaction, as applicable, a notice specifying (A) the date of such record date for the purpose of such dividend or distribution or meeting or consent and a description of such dividend or distribution or the action to be taken at such meeting or by such consent, (B) the date on which any such Liquidation Event, Deemed Liquidation Event pursuant to Section A.4(b) hereof occurred, QPO or other public offering is expected to become effective, or the date on which a vote or written consent pursuant to Section A.5(b)(ii) occurred, and (C) the date on which the books of the Corporation shall close or a record shall be taken with respect to any such event. Such notice shall be accompanied by a certificate prepared by the chief financial officer of the Corporation describing in detail (1) the facts of such transaction, (2) the amount(s) per share of Preferred Stock or Common Stock each holder of Preferred Stock would receive pursuant to the applicable provisions of this Amended and Restated Certificate of Incorporation, and (3) the facts upon which such amounts were determined.

(b) Adjustments; Calculations. Upon the occurrence of each adjustment or readjustment of the applicable Conversion Price pursuant to Section A.6, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of the applicable series of Preferred Stock a certificate setting forth in detail (i) such adjustment or readjustment, (ii) the applicable Conversion Price before and after such adjustment or readjustment, and (iii) the number of shares of Common Stock and the amount, if any, of

other property which at the time would be received upon the conversion of such holder's shares of Preferred Stock. All such calculations shall be made to the nearest cent or to the nearest one hundredth (1/100) of a share, as the case may be.

(c) Waivers.

(i) Any of the rights of the holders of Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock set forth herein may be waived by the affirmative consent or vote of a Majority Interest; provided such waiver by its terms is equally applicable to the holders of Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock; provided further that Section A.6 cannot be waived (including, without limitation, by a Majority Interest pursuant to Section A.6(b)(x)) with respect to (A) the Series B Preferred Stock and the Series B-1 Preferred Stock, without the affirmative consent or vote of the holders of a Series B/B-1 Majority Interest and (B) the Series C Preferred Stock, without the affirmative consent or vote of the holders of a Series C Majority Interest.

(ii) Any of the rights of the holders of Seed Preferred Stock set forth herein may be waived (in a manner that does not apply to the holders of Series A Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock) by the affirmative consent or vote of the holders of a majority of the shares of Seed Preferred Stock then outstanding.

(iii) Any of the rights of the holders of Series A Preferred Stock set forth herein may be waived (in a manner that does not apply to the holders of Seed Preferred Stock, Series B Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock) by the affirmative consent or vote of the holders of a majority of the shares of Series A Preferred Stock then outstanding.

(iv) Subject to Section A.7(b)(ii) and Section A.8(c)(i)(A), any of the rights of the holders of Series B Preferred Stock set forth herein may be waived (in a manner that does not apply to the holders of Seed Preferred Stock, Series A Preferred Stock, Series B-1 Preferred Stock and Series C Preferred Stock) by the affirmative consent or vote of the holders of a majority of the shares of Series B Preferred Stock then outstanding.

(v) Subject to Section A.7(b)(ii) and Section A.8(c)(i)(A), any of the rights of the holders of Series B-1 Preferred Stock set forth herein may be waived (in a manner that does not apply to the holders of Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock) by the affirmative consent or vote of the holders of a majority of the shares of Series B-1 Preferred Stock then outstanding.

(vi) Subject to Section A.7(c)(ii) and Section A.8(c)(i)(B), any of the rights of the holders of Series C Preferred Stock set forth herein may be waived (in a manner that does not apply to the holders of Seed Preferred Stock, Series A Preferred Stock, Series B Preferred Stock and Series B-1 Preferred Stock) by the affirmative consent or vote of a Series C Majority Interest.

9. No Reissuance of Preferred Stock. No share or shares of Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the shares which the Corporation shall be authorized to issue.

10. Contractual Rights of Holders. The various provisions set forth herein for the benefit of the holders of the Preferred Stock shall be deemed contract rights enforceable by them, including, without limitation, one or more actions for specific performance.

B. COMMON STOCK

1. Voting.

(a) Election of Directors. The holders of outstanding shares of Common Stock, voting together as a single class, shall be entitled to elect one (1) Director of the Corporation (the "**Common Stock Director**"). The Common Stock Director shall be elected by the holders of a majority of the outstanding shares of Common Stock. The election of the Common Stock Director shall occur (i) at the annual meeting of holders of capital stock, (ii) at any special meeting of holders of capital stock if such meeting is called for the purpose of electing directors, (iii) at any special meeting of holders of Common Stock called by holders of a majority of the outstanding shares of Common Stock or (iv) by the written consent of holders of a majority of the outstanding shares of Common Stock. If at any time when any share of Common Stock is outstanding the Common Stock Director should cease to be a Director for any reason, the vacancy shall only be filled by the vote or written consent of the holders of a majority of the outstanding shares of Common Stock, voting together as a single class, in the manner and on the basis specified above or as otherwise provided by law. The holders of outstanding shares of Common Stock shall also be entitled to vote in the election of any Additional Director together with holders of outstanding shares of Preferred Stock pursuant to and in accordance with Section A.2(a) above. The holders of outstanding shares of Common Stock may, in their sole discretion, determine not to elect the Common Stock Director as provided herein from time to time, and during any such period the Board of Directors of the Corporation shall not be deemed unduly constituted solely as a result of such vacancy.

(b) Voting Generally. Except as otherwise expressly provided herein or required by law, each holder of outstanding shares of Common Stock shall be entitled to one (1) vote in respect of each share of Common Stock held thereby of record on the books of the Corporation for the election of directors and on all matters submitted to a vote of stockholders of the Corporation. Notwithstanding the provisions of Section

242(b)(2) of the Delaware General Corporation Law, the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of a majority of the outstanding shares of Common Stock and Preferred Stock voting together as a single class.

2. Dividends. Subject to the payment in full of all preferential dividends to which the holders of the Preferred Stock are entitled hereunder, the holders of Common Stock shall be entitled to receive dividends out of funds legally available therefor at such times and in such amounts as the Board of Directors of the Corporation may determine in its sole discretion, with holders of Preferred Stock and Common Stock sharing *pari passu* in such dividends, as contemplated by Section A.3.

3. Liquidation. Upon any Liquidation Event, after the payment or provision for payment of all debts and liabilities of the Corporation and all preferential amounts to which the holders of Preferred Stock are entitled with respect to the distribution of assets in liquidation, the holders of Common Stock shall be entitled to share ratably in the remaining assets of the Corporation available for distribution, as contemplated by Section A.4.

4. Waiver. Any of the rights of the holders of Common Stock set forth herein may be waived (in a manner that does not apply to the holders of Preferred Stock) by the affirmative consent or vote of the holders of a majority of the shares of Common Stock then outstanding.

ARTICLE V

In furtherance of and not in limitation of powers conferred by statute, it is further provided:

1. Election of Directors need not be by written ballot unless the by-laws of the Corporation so provide.

2. Except as provided in Article IV, Section A.7(a)(iv), a majority of the Board of Directors of the Corporation including a majority of the Preferred Directors is expressly authorized to adopt, amend or repeal the by-laws of the Corporation to the extent specified therein.

ARTICLE VI

Meetings of stockholders may be held within or without the State of Delaware, as the by-laws may provide.

ARTICLE VII

To the extent permitted by law, the books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated in the by-laws of the Corporation or from time to time by its Board of Directors of the Corporation.

ARTICLE VIII

A Director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director of the Corporation, except for liability (a) for any breach of the Director's duty of loyalty to the Corporation or its stockholders, (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the Delaware General Corporation Law, or (d) for any transaction from which the Director derived an improper personal benefit. If the Delaware General Corporation Law is amended after the effective date of this Amended and Restated Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of Directors, then the liability of a Director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Any repeal or modification of this Article VIII by the stockholders of the Corporation or by an amendment to the Delaware General Corporation Law shall not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a person serving as a Director prior to or at the time of such repeal or modification.

ARTICLE IX

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which Delaware General Corporation Law permits the Corporation to provide indemnification) through by-law provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the Delaware General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article IX shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

ARTICLE X

The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of, (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a

Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation.

ARTICLE XI

Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Amended and Restated Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

Exhibit 4.2

Execution Version

KALA PHARMACEUTICALS, INC.

THIRD AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT

April 6, 2016

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THIRD AMENDED AND RESTATED
REGISTRATION RIGHTS AGREEMENT

This Third Amended and Restated Registration Rights Agreement, dated as of April 6, 2016 (this "Agreement"), is entered into by and among Kala Pharmaceuticals, Inc., a Delaware corporation (the "Company"), the individuals and entities listed on Schedule A attached hereto (collectively, the "Investors" and each individually, an "Investor") and the individual listed on Schedule B attached hereto (the "Key Holder," and together with the Investors, the "Stockholders").

RECITALS:

WHEREAS, the Company and certain of the Stockholders are parties to that certain Second Amended and Restated Registration Rights Agreement, dated as of April 16, 2014, as amended by Amendment No. 1 and Amendment No. 2 thereto (the "Existing Registration Rights Agreement");

WHEREAS, the Company and certain of the Investors (the "Series C Purchasers") have entered into a Series C Preferred Stock Purchase Agreement on or prior to the date hereof (as amended and/or restated from time to time, the "Series C Purchase Agreement") in connection with the issuance and sale by the Company to such Series C Purchasers of shares of the Company's Series C Preferred Stock, par value $0.001 per share (the "Series C Preferred Stock");

WHEREAS, as a condition precedent to the sale and purchase of the Series C Preferred Stock pursuant to the Series C Purchase Agreement, the Series C Purchasers have required that the Existing Registration Rights Agreement be amended and restated to, among other things, make the Series C Purchasers parties thereto;

WHEREAS, pursuant to Section 10 of the Existing Registration Rights Agreement, the amendment and restatement of the Existing Registration Rights Agreements requires the written consent of the holders of at least fifty percent (50%) of the Registrable Securities (as defined in the Existing Registration Rights Agreement);

WHEREAS, pursuant to Section 14 of the Existing Registration Rights Agreement, the Company shall not, without the written consent of the holders of at least fifty percent (50%) of the Registrable Securities, allow purchasers of the Company's securities to become a party to the Existing Registration Rights

Agreement; and

WHEREAS, the signatories to this Agreement hold the requisite number of Registrable Securities to effect the amendment and restatement of the Existing Registration Rights Agreement and desire to amend and restate the Existing Registration Rights Agreement in its entirety in the manner set forth herein.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements hereinafter set forth, the parties hereto agree as follows:

1. Certain Definitions. As used in this Agreement, the following terms shall have the following respective meanings:

"Charter" shall mean the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

"Commission" shall mean the United States Securities and Exchange Commission, or any other federal agency administering the Securities Act and the Exchange Act at the time.

"Common Stock" shall mean the Company's common stock, par value $0.001 per share.

"Damages" shall mean any loss, claim, damage, expense or liability, joint or several, to which a party hereto may become subject under the Securities Act, the Exchange Act or any other statute or at common law.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended, or any similar successor federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Indemnified Person" shall mean a Company Indemnified Person and/or a Stockholder Indemnified Person, as applicable.

"Joinder Agreement" shall mean a joinder agreement in substantially the form attached hereto as Exhibit I.

"Key Holder Registrable Securities" shall mean the shares of Common Stock held, or hereafter acquired, by the Key Holder from the Company, including without limitation any shares of Common Stock issued to the Key Holder upon the exercise of stock options."

"Person" shall mean an individual, a corporation, a partnership, a joint venture, a trust, an unincorporated organization, a limited liability company or partnership, a government and any agency or political subdivision thereof.

"Preferred Stock" shall mean, collectively, the Seed Preferred Stock, the Series A Preferred Stock, the Series B Preferred Stock, the Series B-1 Preferred Stock and the Series C Preferred Stock.

"Registrable Securities" shall mean (i) the shares of Common Stock issued or issuable upon conversion of the Preferred Stock held, or hereafter acquired, by the Investors (the "Investor Registrable Securities"), (ii) Key Holder Registrable Securities and (iii) any other shares of Common Stock issued or issuable in respect of such Investor Registrable Securities or Key Holder Registrable Securities (because of stock splits, stock dividends, reclassifications, recapitalizations or similar events).

"Securities Act" shall mean the Securities Act of 1933, as amended, or any similar successor federal statute, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"Seed Preferred Stock" shall mean the Company's Seed Preferred Stock, par value $0.001 per share.

"Series A Preferred Stock" shall mean the Company's Series A Preferred Stock, par value $0.001 per share.

"Series B Preferred Stock" shall mean the Company's Series B Preferred Stock, par value $0.001 per share.

"Series B-1 Preferred Stock" shall mean the Company's Series B-1 Preferred Stock, par value $0.001 per share."

2. Demand Registration

(a) At any time after the earlier of (i) five (5) years from the date of this Agreement and (ii) one hundred eighty (180) days after the initial public offering of the Company's Common Stock pursuant to an effective registration under the Securities Act, the holders (excluding the Key Holder) of at least fifty percent (50%) of the Registrable Securities then outstanding (excluding Key Holder Registrable Securities) may notify the Company that they intend to offer or cause to be offered for public sale at least fifty percent (50%) of the Registrable Securities then outstanding (excluding Key Holder Registrable Securities) or any lesser number of Registrable Securities (excluding Key Holder Registrable Securities) if the anticipated aggregate sale price, net of underwriting discounts and commissions, if any, would exceed $10,000,000. Upon receipt of such request, the Company shall promptly deliver notice of such request to all Stockholders holding Registrable Securities who shall then have thirty (30) days to notify the Company in writing of their desire to be included in such registration. If the request for registration contemplates an underwritten public offering, the Company shall state such in the written notice and in such event the right of any Person to participate in such registration shall be conditioned upon such Person's participation in such underwritten public offering and the inclusion of such Person's Registrable Securities in the underwritten public offering to the extent provided herein. The Company will use its reasonable best efforts to expeditiously effect (but in any event no later than thirty (30) days after such request) the registration of all Registrable Securities whose holders request participation in such registration under the Securities Act, but only to the extent provided for in this Agreement; provided, however, that the Company shall not be required to effect registration pursuant to a request under this Section 2(a) more than two (2) times for the holders of the Registrable Securities as a group. Notwithstanding anything to the contrary contained herein, no request may be made under this Section 2(a) within ninety (90) days after the effective date of a registration statement filed by the Company covering a firm commitment underwritten public offering in which the holders of Registrable Securities shall have been entitled to join pursuant to Section 4 and in which there shall have been effectively registered all Registrable Securities as to which registration shall have been requested. A registration will not count as a requested registration under this Section 2(a) unless and until the registration statement relating to such registration has been declared effective by the Commission; provided, however, that a majority in interest of the participating holders of Registrable Securities may request, in writing, that the Company withdraw a registration statement which has been filed under this Section 2(a) but has not yet been declared effective, and a majority in interest of such holders may thereafter

request the Company to reinstate such registration statement, if permitted under the Securities Act, or to file another registration statement, in accordance with the procedures set forth herein and without reduction in the number of demand registrations permitted under this Section 2(a).

(b) If a requested registration involves an underwritten public offering and the managing underwriter of such offering determines in good faith that the number of securities sought to be offered should be limited due to market conditions, then the number of securities to be included in such underwritten public offering shall be reduced to a number deemed satisfactory by such managing underwriter; provided, that the securities to be excluded shall be determined in the following order of priority: (i) first, persons not having any contractual or other right to include such securities in the registration statement, (ii) second, securities held by any other Persons (other than the holders of Registrable Securities) having a contractual, incidental "piggy back" right to include such securities in the registration statement, (iii) third, securities to be registered by the Company pursuant to such registration statement, (iv) fourth, Registrable Securities of holders who did not make the original request for registration and, if necessary, (v) fifth, Registrable Securities of holders who requested such registration pursuant to Section 2(a). If there is a reduction of the number of Registrable Securities pursuant to clauses (iv) or (v), such reduction shall be made on a *pro rata* basis (based upon the aggregate number of Registrable Securities held by such holders).

(c) With respect to a request for registration pursuant to Section 2(a) which is for an underwritten public offering, the managing underwriter shall be chosen by the holders of a majority of the Registrable Securities to be sold in such offering, subject only to the consent of the Company, which consent shall not be unreasonably withheld. The Company may not cause any other registration of securities for sale for its own account (other than a registration effected solely to implement an employee benefit plan) to become effective within one hundred twenty (120) days following the effective date of any registration required pursuant to this Section 2.

3. Form S-3. An Investor or Investors holding Registrable Securities (excluding any Key Holder Registrable Securities) anticipated to have an aggregate sale price (net of underwriting discounts and commissions, if any) in excess of $1,000,000 shall have the right to request any number of registrations on Form S-3 (or any successor form) for the Registrable Securities held by such requesting holder or holders; provided, however, that the Company (i) is then eligible to use such Form S-3 (or successor form) and (ii) shall not be required to file more than two (2) such registration statements on Form S-3 (or any successor form) in any twelve (12) month period. Such requests shall be in writing and shall state the number of shares of Registrable Securities to be disposed of and the intended method of disposition of such shares by such holder or holders. The Company shall give notice to all other holders of the Registrable Securities of the receipt of a request for registration pursuant to this Section 3 and such holders of Registrable Securities shall then have thirty (30) days to notify the Company in writing of their desire to participate in the registration. The Company shall use its reasonable best efforts to effect promptly the registration of all shares on Form S-3 (or any successor form) to the extent requested by such holders. The Company shall use its reasonable best efforts to keep such registration statement effective until the earlier of ninety (90) days or until such holders have completed the distribution described in such registration statement.

4. Piggyback Registration. If the Company at any time proposes to register any of its securities under the Securities Act for sale to the public (except with respect to registration statements on Forms S-4, S-8 or another form not available for registering the Registrable Securities for sale to the public), each such time it will give written notice at the applicable address of record to each holder of Registrable Securities of its intention to do so. Upon the written request

of any of such holders of the Registrable Securities, given within twenty (20) days after receipt by such Person of such notice, the Company will, subject to the limits contained in this Section 4, use its reasonable best efforts to cause all such Registrable Securities of said requesting holders to be registered under the Securities Act and qualified for sale under any state blue sky law, all to the extent required to permit such sale or other disposition of said Registrable Securities; provided, however, that if the Company is advised in writing in good faith by any managing underwriter of the Company's securities being offered in a public offering pursuant to such registration statement that the amount to be sold by persons other than the Company (collectively, "Selling Stockholders") is greater than the amount which can be offered without adversely affecting the offering, the Company may reduce the amount offered for the accounts of Selling Stockholders (including such holders of shares of Registrable Securities) to a number deemed satisfactory by such managing underwriter; provided, further, that (a) in no event shall the amount of Registrable Securities of Selling Stockholders 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; and (b) any shares to be excluded shall be determined in the following order of priority: (i) securities held by any Persons not having any such contractual, incidental registration rights, (ii) securities held by any Persons having contractual, incidental registration rights pursuant to an agreement which is not this Agreement, and (iii) the Registrable Securities sought to be included by the holders thereof as determined on a *pro rata* basis (based upon the aggregate number of Registrable Securities held by such holders).

5. Registration Procedures. If and whenever the Company is required by the provisions of this Agreement to use its reasonable best efforts to promptly effect the registration of any of its securities under the Securities Act, the Company will:

(a) use its reasonable best efforts to diligently prepare and file with the Commission a registration statement on the appropriate form under the Securities Act with respect to such securities, which form shall comply as to form in all material respects with the requirements of the applicable form and include all financial statements required by the Commission to be filed therewith, and use its reasonable best efforts to cause such registration statement to become and remain effective for, except as specified in Section 3 above, a period of up to one hundred eighty (180) days or, if earlier, until completion of the proposed offering;

(b) use its reasonable best efforts to diligently prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective until the selling Stockholder(s) have completed the distribution described in such registration statement, unless otherwise set forth herein, and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all securities covered by such registration statement whenever the seller or sellers of such securities shall desire to sell or otherwise dispose of the same, but only to the extent provided in this Agreement;

(c) furnish to each selling Stockholder and the underwriters, if any, such number of copies of such registration statement, any amendments thereto, any documents incorporated by reference therein, the prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as such selling

Stockholder may reasonably request in order to facilitate the public sale or other disposition of the securities owned by such selling Stockholder;

(d) use its reasonable best efforts to register or qualify the securities covered by such registration statement under such other securities or state blue sky laws of such jurisdictions as each selling Stockholder shall reasonably request, and do any and all other acts and things which may be necessary under such securities or blue sky laws to enable such selling Stockholder to consummate the public sale or other disposition in such jurisdictions of the securities owned by such selling Stockholder, except that the Company shall not for any such purpose be required to qualify to do business as a foreign corporation or to file a general consent to service of process in any such states or jurisdictions wherein it is not already so qualified;

(e) within a reasonable time before each filing of the registration statement or prospectus or amendments or supplements thereto with the Commission, furnish to counsel selected by the selling Stockholders copies of such documents proposed to be filed, having considered in good faith any comments to such documents from such counsel;

(f) immediately notify each selling Stockholder, such selling Stockholder's counsel and any underwriter (and if requested by any such Person, confirm such notice in writing) of the happening of any event that makes any statement made in the registration statement or related prospectus untrue or which requires the making of any changes in such registration statement or prospectus so that they will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein in the light of the circumstances under which they were made not misleading; and, as promptly as practicable thereafter, prepare and file with the Commission and furnish a supplement or amendment to such prospectus so that, as thereafter deliverable to the purchasers of such Registrable Securities, such prospectus will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(g) use its reasonable best efforts to prevent the issuance of any order suspending the effectiveness of a registration statement, and if one is issued, use its reasonable best efforts to obtain the withdrawal of any order suspending the effectiveness of a registration statement at the earliest possible moment;

(h) if requested by the managing underwriter or underwriters (if any), any selling Stockholder, or such selling Stockholder's counsel, promptly incorporate in a prospectus supplement or post-effective amendment such information as such Person reasonably and appropriately requests to be included therein and promptly make all required filings of such prospectus supplement or post-effective amendment;

(i) make available to each selling Stockholder, any underwriter participating in any disposition pursuant to a registration statement, and any attorney, accountant or other agent or representative retained by any such selling Stockholder or underwriter (collectively, the "Inspectors"), all financial and other records, pertinent corporate documents and properties of the Company (collectively, the "Records"), as shall be reasonably necessary to enable them to exercise their due diligence responsibility, and cause the Company's officers, directors and

employees to supply all information reasonably requested by any such Inspector in connection with such registration statement as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(j) 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 underwriter(s) of such offering and use its reasonable best efforts to facilitate the public offering of the securities;

(k) furnish to each prospective selling Stockholder a signed counterpart, addressed to the prospective selling Stockholder, of (A) an opinion of counsel for the Company, dated the effective date of the registration statement, and (B) a "comfort" letter signed by the independent public accountants who have certified the Company's financial statements included in the registration statement, covering substantially the same matters with respect to the registration statement (and the prospectus included therein) and (in the case of the accountants' letter) with respect to events subsequent to the date of the financial statements, as are customarily covered (at the time of such registration) in opinions of the Company's counsel and in accountants' letters delivered to the underwriters in underwritten public offerings of securities;

(l) cause the securities covered by such registration statement to be listed on the securities exchange or quoted on the quotation system on which the Common Stock of the Company is then listed or quoted (or if the Common Stock is not yet listed or quoted, then on such exchange or quotation system as the Company shall determine);

(m) otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the Commission and make generally available to its security holders, in each case as soon as practicable, but not later than thirty (30) days after the close of the period covered thereby, an earnings statement of the Company which will satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder (or any comparable successor provisions);

(n) otherwise cooperate with the underwriter(s), the Commission and other regulatory agencies and take all actions and execute and deliver or cause to be executed and delivered all documents necessary to effect the registration of any securities under this Agreement; and

(o) during the period when the prospectus is required to be delivered under the Securities Act, promptly file all documents required to be filed with the Commission pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act.

6. Expenses. All expenses incurred by the Company or the selling Stockholders in effecting the registrations provided for in Sections 2, 3 and 4 of this Agreement, including, without limitation, all registration and filing fees, printing expenses, fees and disbursements of counsel for the Company, the reasonable fees and disbursements of one counsel (the "Selling Stockholder Counsel") for the selling Stockholders (selected by at least fifty percent (50%) in interest of Registrable Securities being registered and held by the selling Stockholders participating in such registration), underwriting expenses (other than fees, commissions or discounts), expenses of any audits incident to or required by any such registration and expenses of complying with the

securities or blue sky laws of any jurisdictions (all of such expenses referred to as "Registration Expenses"), shall be paid by the Company; provided, however, that the Company shall not be required to pay for any Registration Expenses of any registration proceeding begun pursuant to Section 2 if the registration request is subsequently withdrawn at the request of the selling Stockholders holding at least fifty percent (50%) in interest of the Registrable Securities requested to be registered pursuant to Section 2 (in which case, all such selling Stockholders shall bear such Registration Expenses pro rata based upon the number of Registrable Securities held by each such selling Stockholder that were to be included in the withdrawn registration), unless the selling Stockholders holding at least fifty percent (50%) in interest of the Registrable Securities requested to be registered pursuant to Section 2 forfeit their right to one registration pursuant to Section 2; provided that if, at the time of such withdrawal, the selling Stockholders shall have learned of a material adverse change in the condition, business, or prospects of the

Company from that known to the selling Stockholders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information, then the selling Stockholders shall not be required to pay any of such Registration Expenses and shall not forfeit their right to one registration pursuant to Section 2. All Selling Expenses (as defined below) relating to Registrable Securities registered pursuant to this Agreement shall be borne and paid by the selling Stockholders pro rata on the basis of the number of Registrable Securities registered on their behalf. "Selling Expenses" means all underwriting discounts, selling commissions and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any selling Stockholder, except for the fees and disbursements of the Selling Stockholder Counsel borne and paid by the Company as provided in this Section 6.

7. Indemnification.

(a) The Company shall indemnify and hold harmless each selling Stockholder (including its partners (including partners of partners and shareholders of such partners)), the directors, officers, employees and agents of each such selling Stockholder, legal counsel, accountants and investment advisers for each such selling Stockholder, any underwriter (as defined in the Securities Act) of an offering of Registrable Securities of such Stockholder, and each Person, if any, who controls (within the meaning of the Securities Act) such selling Stockholder or underwriter (each, a "Company Indemnified Person") against any Damages, insofar as such Damages (or action in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained, on the effective date thereof, in any registration statement of the Company under which securities held by such party were registered under the Securities Act, including any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto, (ii) any omission or alleged omission by the Company to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (iii) any violation by the Company of the Securities Act, the Exchange Act, any state securities or "blue sky" laws or any rule or regulation promulgated under the Securities Act, the Exchange Act or any state securities or "blue sky" laws. Except as otherwise provided in Section 7(d), the Company shall reimburse each such Company Indemnified Person in connection with investigating or defending any claim or proceeding from which Damages may result. Notwithstanding the foregoing, the Company shall not be liable to any Company Indemnified Person in any such case to the extent that any such Damages arise out of or are based upon any untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement, preliminary or final prospectus, or amendment or supplement

thereto, in reliance upon and in conformity with information furnished in writing to the Company by such Company Indemnified Person specifically for use therein. The Company shall not be required to indemnify any Company Indemnified Person against any liability arising from any untrue or misleading statement or omission contained in any preliminary prospectus if such deficiency is corrected in the final prospectus or for any liability which arises out of the failure of any Company Indemnified Person to deliver a prospectus as required by the Securities Act regardless of any investigation made by or on behalf of such Company Indemnified Person; and the provisions of this sentence shall survive any transfer of such securities by such selling Stockholder.

(b) Each selling Stockholder shall indemnify and hold harmless each other selling Stockholder of any securities, the Company, its directors and officers, any underwriter (as defined in the Securities Act), legal counsel and accountants for the Company, and each other Person, if any, who controls (within the meaning of the Securities Act) the Company or such underwriter (each, a "Stockholder Indemnified Person"), against any Damages, insofar as such Damages (or action in respect thereof) arise out of or are based upon (i) any untrue statement or alleged untrue statement of any material fact contained, on the effective date thereof, in any registration statement of the Company under which securities held by such party were registered under the Securities Act, including any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereto or (ii) any omission or alleged omission by such selling Stockholder to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in the case of clauses (i) and (ii) of this sentence to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in such registration statement, preliminary or final prospectus, amendment or supplement thereto in reliance upon and in conformity with information furnished in writing to the Company by such selling Stockholder specifically for use therein. Such selling Stockholder shall reimburse any Stockholder Indemnified Person for any legal fees incurred in investigating or defending any claim or proceeding from which Damages may result. Notwithstanding the foregoing, except in the case of fraud or willful misconduct by a selling Stockholder, in no event shall the liability of any selling Stockholder for indemnification under this Section 7 exceed the lesser of (i) that proportion of the total of such Damages equal to the proportion of the total Registrable Securities sold under such registration statement by such selling Stockholder compared to the total Registrable Securities sold under such registration statement by the Selling Stockholders, or (ii) the amount equal to the net proceeds from the offering received by such selling Stockholder. No selling Stockholder shall be required to indemnify any Stockholder Indemnified Person against any Damages arising from any untrue or misleading statement or omission contained in any preliminary prospectus if such deficiency is corrected in the final prospectus or for any Damages which arise out of the failure of any Stockholder Indemnified Person to deliver a prospectus as required by the Securities Act.

(c) Indemnification similar to that specified in Sections 7(a) and (b) shall be given by the Company and each selling Stockholder (with such modifications as may be appropriate) with respect to any required registration or other qualification of their securities under any federal or state law or regulation of governmental authority other than the Securities Act.

(d) In the event the Company, any selling Stockholder or other Person receives a complaint, claim or other notice of any liability or action, giving rise to a claim for

indemnification under Section 7(a), (b) or (c) above, the Person claiming indemnification under such paragraphs shall promptly notify the Person against whom indemnification is sought of such complaint, notice, claim or action, and such indemnifying Person shall have the right to investigate and defend any such complaint, notice, claim or action.

(e) If the indemnification provided for in this Section 7 for any reason is held by a court of competent jurisdiction to be unavailable to an Indemnified Person in respect of any Damages, then each indemnifying party under this Section 7, in lieu of indemnifying such Indemnified Person under this Section 7, shall contribute to the amount paid or payable by such Indemnified Person as a result of such Damages (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, the selling Stockholder(s) and the underwriters from the offering of Registrable Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, the selling Stockholder(s) and the underwriters in connection with the statements or omissions which resulted in such Damages, as well as any other relevant equitable considerations. The relative benefits received by the Company, the selling Stockholder(s) and the underwriters shall be deemed to be in the same respective proportions that the net proceeds from the offering (before deducting expenses) received by the Company, the selling Stockholder(s), and the underwriting discount received by the underwriters, in each case, as set forth in the table on the cover page of the applicable prospectus, bear to the aggregate public offering price of the Registrable Securities. The relative fault of the Company, the selling Stockholder(s) and the underwriters 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 Company, the selling Stockholder(s), or the underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the selling Stockholders agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by *pro rata* or per capita allocation or by any other method of allocation which does not take account the equitable considerations referred to in the immediately preceding paragraph. Except in the case of fraud or willful misconduct by a selling Stockholder, in no event shall a selling Stockholder be required to contribute under this Section 7(e), when combined with the amounts paid or payable by such Stockholder pursuant to Section 7(b), in excess of the lesser of (i) that proportion of the total of such Damages equal to the proportion of the total Registrable Securities sold under such registration statement by such selling Stockholder compared to the total Registrable Securities sold under such registration statement by the Selling Stockholders, or (ii) the amount equal to the net proceeds from the offering received by such selling Stockholder. No Person found guilty of fraudulent representation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not found guilty of such fraudulent misrepresentation.

(f) The amount paid by an indemnifying party or payable to an Indemnified Person as a result of any Damages referred to in this Section 7 shall be deemed to include, subject to limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Person in connection with investigating or defending any such action or claim, payable as the same are incurred. The indemnification and contribution provided for in this Section 7 will remain in

full force and effect regardless of any investigation made by or on behalf of the indemnified parties or any other officer, director, employee, agent or controlling person of the indemnified parties.

(g) No indemnifying party, in the defense of any complaint, notice, claim or action, shall enter into a consent or entry of any judgment or enter into a settlement without the consent of the Indemnified Person, which consent shall not be unreasonably withheld or delayed. Notwithstanding anything to the contrary set forth herein, (i) the indemnity agreement contained in Section 7(a) shall not apply to amounts paid in settlement of any complaint, notice, claim or action if such settlement is effected without the consent of the Company, which consent will not be unreasonably withheld or delayed, and (ii) the indemnity agreement contained in Section 7(b) shall not apply to amounts paid in settlement of any complaint, notice, claim or action if such settlement is effected without the consent of the selling Stockholders, which consent will not be unreasonably withheld or delayed.

8. Compliance with Rule 144. In the event that the Company (i) registers a class of securities under Section 12 of the Exchange Act or (ii) shall commence to file reports under Section 13 or 15(d) of the Exchange Act, the Company will use its reasonable best efforts thereafter to file with the Commission such information as is required under the Exchange Act for so long as there are holders of Registrable Securities; and in such event, the Company shall use its reasonable best efforts to take all action as may be required as a condition to the availability of Rule 144 under the Securities Act (or any comparable successor rules). After the occurrence of the first underwritten public offering of Common Stock pursuant to an offering registered under the Securities Act on Form S-l (or any comparable successor forms), subject to the limitations on transfers imposed by this Agreement, the Company shall use its reasonable best efforts to facilitate and expedite transfers of Registrable Securities pursuant to Rule 144 under the Securities Act, which efforts shall include timely notice to its transfer agent to expedite such transfers of Registrable Securities.

9. Rule 144A Information. The Company shall, upon written request of any Investor, provide to such Investor and to any prospective institutional transferee of the Common Stock designated by such Investor, such financial and other information as is available to the Company or can be obtained by the Company without material expense and as such Investor may reasonably determine is required to permit such transfer to comply with the requirements of Rule 144A promulgated under the Securities Act.

10. Amendments and Waivers. Subject to the last sentence of Section 12, 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 holders of at least sixty-seven percent (67%) of the Registrable Securities issued or issuable upon conversion of Preferred Stock then outstanding, provided that any amendment that would materially and adversely affect any Stockholder in a disproportionate manner than any other Stockholder shall not be effective against such Stockholder without such Stockholder's written consent with respect thereto. For the purposes of this Agreement, no course of dealing between or among any of the parties hereto and no delay on the part of any party hereto in exercising any rights hereunder shall operate as a waiver of the rights hereof.

11. Postponement. The Company may postpone the filing of any registration statement required hereunder for a reasonable period of time, not to exceed ninety (90) days in the aggregate during any twelve-month period, if the Company has been advised by legal counsel that such filing would require a special audit or the disclosure of a material impending transaction or other matter and the Company's Board of Directors determines reasonably and in good faith that such disclosure would have a material adverse effect on the Company (a "Black-Out Period"). Upon notice of the existence of a Black-Out Period from the Company to any Stockholder or Stockholders with respect to any registration statement already effective, such Stockholder or Stockholders shall refrain from selling their Registrable Securities under such registration statement until such Black-Out Period has ended; provided, however, that the Company shall not have the right to impose a Black-Out Period with respect to any registration statement that is already effective more than once during any period of twelve (12) consecutive months and in no event shall such Black-Out Period exceed sixty (60) days.

12. Market Stand-Off. Each Stockholder agrees, that if requested by the Company and an underwriter in connection with the initial public offering of the Company of Common Stock under the Securities Act on a registration statement on Form S-1(the "IPO"), not to directly or indirectly offer, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of or otherwise dispose of or transfer any securities of the Company held by it immediately prior to the effectiveness of the registration statement relating to the IPO for such period, not to exceed one hundred eighty (180) days (plus any additional period of time as may be requested by the Company or such underwriter for the purpose of complying with FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto) following the effective date of the registration statement for the IPO, as such underwriter shall specify reasonably and in good faith; provided, however, that all officers and directors of the Company and all 1% or greater stockholders of the Company enter into similar agreements; provided, further, however, that in the event the Company or such underwriter, as applicable, releases any securities of the Company from the restrictions set forth in this Section 12 or similar restrictions (in any such case, the "Released Securities"), the foregoing provisions shall be waived or terminated, as applicable, to the same extent and with respect to the same percentage of securities of each Stockholder as the percentage of Released Securities represent with respect to the securities held by the holder of such Released Securities. For purposes of clarity, the restrictions set forth herein shall not apply to shares acquired in the IPO or in the open market following the IPO. Notwithstanding anything to the contrary contained herein, any amendment to this Section 12 that would adversely affect the holders of the Series B Preferred Stock or the Series B-1 Preferred Stock or the Series C Preferred Stock, as the case may be, shall require the written consent of (i) the holders of at least a majority of the Series B Preferred Stock and Series B-1 Preferred Stock then outstanding, in the case of an amendment that adversely affects the holders of the Series B Preferred Stock or the Series B-1 Preferred Stock and (ii) the holders of at least a majority of the Series C Preferred Stock then outstanding in the case of an amendment that adversely affects the holders of the Series C Preferred Stock.

13. Transferability of Registration Rights. The registration rights set forth in this Agreement are transferable to each transferee of Registrable Securities. Each subsequent holder of Registrable Securities must consent in writing to be bound by the terms and conditions of this Agreement in order to acquire the rights granted pursuant to this Agreement.

14. Rights Which May Be Granted to Subsequent Stockholders. Other than permitted transferees of Registrable Securities under Section 13, the Company shall not, without the prior written consent of holders of at least fifty percent (50%) in interest of the Registrable Securities then outstanding, (a) allow purchasers of the Company's securities to become a party to this Agreement (except as permitted by Section 17(e) of this Agreement) or (b) grant any other registration rights, other than any incidental or so called piggyback registration rights to any third parties that are not inconsistent with the terms of this Agreement.

15. Termination of Registration Rights. The right of any Stockholder to request registration or inclusion of Registrable Securities in any registration pursuant to Sections 2, 3, or 4 of this Agreement shall terminate on the seventh (7^{th}) anniversary of the Company's initial public offering.

16. Damages. The Company recognizes and agrees that each holder of Registrable Securities may not have an adequate remedy if the Company fails to comply with the terms and provisions of this Agreement and that damages may not be readily ascertainable, and the Company expressly agrees that, in the event of such failure, the holder of Registrable Securities or any other Person entitled to the benefits of this Agreement shall be entitled to seek specific performance of any and all provisions hereof or to seek injunctive relief against the Company from continuing to commit any such breach of this Agreement.

17. Miscellaneous.

(a) Notices. All notices, requests, demands and other communications provided for herein shall be in writing and shall be deemed to have been duly given, delivered and received upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next business day, (c) one (1) business day after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) deposit with a nationally recognized overnight courier, freight prepaid, specifying next business day delivery. All notices, requests, demands and other communications provided for herein shall be given to the applicable party at the addresses indicated below:

To the Company:

Kala Pharmaceuticals, Inc.
100 Beaver Street
Suite 201
Waltham, MA 02453
Attention: Chief Executive Officer
Facsimile: 781-642-0399
Email: mark.iwicki@kalarx.com

With a copy to:

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, MA 02109

Attention: Lia Der Marderosian, Esq.
Facsimile: 617-526-5000
Email: Lia.DerMarderosian@wilmerhale.com

If to the Investors, only at their respective addresses as set forth on the signature pages or Schedule A attached hereto, with a copy to Proskauer Rose LLP, One International Place, Boston, Massachusetts 02110-2600, Attn: Ori Solomon, Esq., osolomon@proskauer.com, Facsimile: 617-526-9899, a copy to Greenberg Traurig, LLP, One International Place, Boston, Massachusetts 02110, Attn: Bradley A. Jacobson, Esq., jacobsonb@gtlaw.com, Facsimile: 617-279-8402, a copy to Morrison, Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304, Attn: Paul "Chip" Lion III, PLion@mofo.com.

If to the Key Holder, at his address as set forth on Schedule B attached hereto.

If to any other holder of Registrable Securities:

At such Person's address for notice as set forth in the books and records of the Company or, as to each of the foregoing, at such other address as shall be designated by such Person in a written notice to other parties complying as to delivery with the terms of this Section 17(a).

(b) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state of Delaware, without giving effect to conflict of laws principles thereof.

(c) Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(d) Severability. If any provision of this Agreement shall be held to be illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall attach only to such provision and shall not in any manner affect or render illegal, invalid or unenforceable any other provision of this Agreement, and this Agreement shall be carried out as if any such illegal, invalid or unenforceable provision were not contained herein.

(e) Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering to the Company a Joinder Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Stockholders shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

(f) Entire Agreement. This Agreement, including any schedules and exhibits hereto, constitutes the entire agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. For the avoidance of doubt, upon the effectiveness of this

Agreement, the Existing Registration Rights Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

[Signature pages follow.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

COMPANY:

KALA PHARMACEUTICALS, INC.

By: /s/ Mark Iwicki
Name: Mark Iwicki
Title: Chief Executive Officer

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS:

LUX VENTURES II, L.P.
By: Lux Venture Partners II, L.P., its General Partner
By: Lux Venture Associates II, LLC, its General Partner
By: Lux Capital Management, LLC, its Sole Member

By: /s/ Peter Hébert
Name: Peter Hébert
Title: Managing Partner

LUX VENTURES II SIDECAR, L.P.
By: Lux Venture Partners II, L.P., its General Partner
By: Lux Venture Associates II, LLC, its General Partner
By: Lux Capital Management, LLC, its Sole Member

By: /s/ Peter Hébert
Name: Peter Hébert
Title: Managing Partner

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

HOLLY SMITH-NORMAN 2007 TRUST, DATED NOVEMBER 24, 2007, AS AMENDED

By: /s/ Burr R. Smith
Name: Burr R. Smith
Title: Trustee

2012 TRUST AGREEMENT OF VICTORIA SMITH TRAUSCHT, DATED SEPTEMBER 18, 2012

By: /s/ Victoria Smith Trauscht
Name: Victoria Smith Trauscht
Title: Trustee

BRISCO-DAVIS GROUP, LLC

By: /s/ Burr R. Smith
Name: Burr R. Smith
Title: Manager

DAVIS CLEARING HOUSE, LLC

By: /s/ Burr R. Smith
Name: Burr R. Smith
Title: Manager

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

2011 TRUST AGREEMENT OF KAREN CHASE SMITH, DATED FEBRUARY 22, 2012

By: /s/ Karen Chase Smith
Name: Karen Chase Smith
Title: Trustee

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

THIRD ROCK VENTURES, L.P.
By: Third Rock Ventures GP, L.P., its General Partner
By: TRV GP, LLC, its General Partner

By: /s/ Kevin Gillis
Name: Kevin Gillis
Title: CFO

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

POLARIS VENTURE PARTNERS V, L.P.
By: Polaris Venture Management Co. V, L.L.C., its General Partner

By: /s/ William E. Bilodeau
Name: William E. Bilodeau
Title: Attorney-in-fact

POLARIS VENTURE PARTNERS ENTREPRENEURS' FUND V, L.P.
By: Polaris Venture Management Co. V, L.L.C., its General Partner

By: /s/ William E. Bilodeau
Name: William E. Bilodeau
Title: Attorney-in-fact

POLARIS VENTURE PARTNERS FOUNDERS' FUND V, L.P.
By: Polaris Venture Management Co. V, L.L.C., its General Partner

By: /s/ William E. Bilodeau
Name: William E. Bilodeau
Title: Attorney-in-fact

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

POLARIS VENTURE PARTNERS SPECIAL FOUNDERS' FUND V, L.P.
By: Polaris Venture Management Co. V, L.L.C., its General Partner

By: /s/ William E. Bilodeau
Name: William E. Bilodeau
Title: Attorney-in-fact

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

LIGHTHOUSE CAPITAL PARTNERS VI, L.P.
By: Lighthouse Management Partners VI, L.L.C., its General Partner

By: /s/ Christy Barnes
Name: Christy Barnes
Title: Managing Director

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

CVF, LLC

By: /s/ Richard H. Robb
Name: Richard H. Robb
Title: Manager

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

BENON GROUP LTD.

By: /s/ Pierre Valla
Name: Pierre Valla
Title: Director

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

RA CAPITAL HEALTHCARE FUND, L.P.

BY: RA CAPITAL MANAGEMENT, LLC

ITS: GENERAL PARTNER

By: /s/ Rajeev Shah
Name: Rajeev Shah
Title: Authorized Signatory

BLACKWELL PARTNERS LLC—SERIES A

By: /s/ Justin B. Nixon
Name: Justin B. Nixon
Title: DUMAC, Inc.
Authorized Agent

By: /s/ Jannine M. Lall
Name: Jannine M. Lail
Title: Controller
DUMAC, Inc.
Authorized Agent

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

YSIOS BIOFUND I FCR
By: Ysios Capital Partners SGEIC, SA, its General Partner

By: /s/ Karen Wagner
Name: Karen Wagner
Title: General Partner

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

HADLEY HARBOR MASTER INVESTORS (CAYMAN) L.P.

By: Wellington Management Company LLP, as investment adviser

By: /s/ Emily Babalas
Name: Emily Babalas
Title: Managing Director and Counsel

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

LONGITUDE VENTURE PARTNERS II, L.P.

By: Longitude Capital Partners II, LLC

Its: General Partner

By: /s/ Juliet Tammenoms Bakker
Name: Juliet Tammenoms Bakker
Title: Managing Director

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

CDK ASSOCIATES, L.L.C.

By: /s/ Karen Cross
Name: Karen Cross
Title: Treasurer

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

SCOTT MORENSTEIN

By: /s/ Scott Morenstein
Name: Scott Morenstein

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

ORBIMED PRIVATE INVESTMENTS VI, LP

By: OrbiMed Capital GP VI LLC
Its: General Partner

By: OrbiMed Advisors LLC
Its: Managing Member

By: /s/ Jonathan Silverstein
Name: Jonathan Silverstein
Title: Member

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

VIVO CAPITAL FUND VIII, L.P.

By: Vivo Capital VIII, LLC
Its: General Partner

By: /s/ Chen Yu
Name: Chen Yu
Title: Managing Member

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

VIVO CAPITAL SURPLUS FUND VIII, L.P.

By: Vivo Capital VIII, LLC
Its: General Partner

By: /s/ Chen Yu
Name: Chen Yu
Title: Managing Member

[Signature Page to Third Amended and Restated Registration Rights Agreement]

INVESTORS (cont.):

ALEXANDRIA EQUITIES, LLC,
a Delaware limited liability company

By: Alexandria Real Estate Equities, Inc., a Maryland corporation, its managing member

By: /s/ Jennifer Banks
Name: Jennifer Banks
Title: EVP, General Counsel

[Signature Page to Third Amended and Restated Registration Rights Agreement]

KEY HOLDER:

/s/ Mark Iwicki
Mark Iwicki

[Signature Page to Third Amended and Restated Registration Rights Agreement]

Schedule A

Investors

Lux Ventures II, L.P.
Lux Ventures II Sidecar, L.P.
c/o Lux Capital Management, LLC
295 Madison Avenue, 24th floor
New York, NY 10017
Attn: Robert Paull

Brisco-Davis Group, LLC
Davis Clearing House, LLC
2012 Trust Agreement of Victoria Smith Trauscht, dated September 18, 2012
Holly Smith-Norman 2007 Trust, dated November 24, 2007, as amended
2011 Trust Agreement of Karen Chase Smith, dated February 22, 2012
453 N. Lindbergh Blvd., 2nd Floor
St. Louis, MO 63141
Attn: Kate Smith

CVF, LLC
222 N. La Salle St.
Suite 2000
Chicago, IL 60601
Attn: Richard H. Robb

Polaris Venture Partners V, L.P.
Polaris Venture Partners Entrepreneurs' Fund V, L.P.
Polaris Venture Partners Founders' Fund V, L.P.
Polaris Venture Partners Special Founders' Fund V, L.P.
Polaris Venture Partners
One Marina Park Drive, 10th Floor
Boston, MA 02210
Attn: Kevin Bitterman

Schedule A

Investors

Third Rock Ventures, L.P.
Third Rock Ventures
29 Newbury Street #301
Boston, MA 02116
Attn: Robert I. Tepper, M.D.

William Wachtel
c/o Wachtel Missry LLP
One Dag Hammarskjold Plaza
885 Second Avenue
New York, NY 10017
Attn: William Wachtel

Larry Fritz
P.O. Box 676150
Rancho Santa Fe, CA 92067

Adam Kalish
Lux Capital Management
295 Madison Avenue, 24th Floor
New York, NY 10017
Attn: Adam Kalish

Lighthouse Capital Partners VI, L.P.
3555 Alameda de las Pulgas, Suite 200
Menlo Park, California 94025
Attn: Contracts Administration

Schedule A

Investors

Benon Group Ltd.
Address For Notice:
Benon Group Ltd.
c/o Nathaniel de Rothschild Holdings, Ltd.
152 West 57th Street
37th Floor
New York, NY 10019

With a copy to:

Ellen S. Brody
Roberts & Holland LLP
825 8th Avenue, 37th Fl
New York, NY 10019

Ysios BioFund I FCR
c/o Ysios Capital Partners SGEIC, SA
Travessera de Gracia 11, 8th Floor
08021 Barcelona, Spain
Attn: Karen Wagner, General Partner

Alexandria Equities, LLC
385 E. Colorado Blvd., Suite 299
Pasadena, California 91101
Attn: Chief Financial Officer

RA Capital Healthcare Fund, L.P.
Blackwell Partners LLC — Series A
20 Park Plaza
Suite 1200
Boston, Massachusetts 02116
Attn: Nicholas McGrath

Schedule A

Investors

Hadley Harbor Master Investors (Cayman) L.P.
c/o Wellington Management Company LLP
Attention: Legal and Compliance Department
280 Congress Street
Boston, Massachusetts 02210
Facsimile Number: 617-289-5699

Longitude Venture Partners II, L.P.

800 El Camino Real, Suite 220
Menlo Park, CA 94025
Attention: Greg Grunberg

Vivo Capital Fund VIII, L.P.
575 High Street, Suite 201
Palo Alto, CA 94301
Attention: Chen Yu, Managing Partner

Vivo Capital Surplus Fund VIII, L.P.
575 High Street, Suite 201
Palo Alto, CA 94301
Attention: Chen Yu, Managing Partner

OrbiMed Private Investments VI, LP
c/o OrbiMed Advisors LLC
601 Lexington Avenue, 45th Floor
New York, NY 10022
Attn: Jonathan Silverstein

CDK Associates, L.L.C.
Attn: Heath Weisberg
CAM Capital
731 Alexander Road, Building 2
Princeton, NJ 08540

Scott Morenstein
635 West 42nd Street, Apt 45E
NY, NY 10036

Schedule B
Key Holder

Mark Iwicki
120 Dover Rd.
Wellesley, MA 02482

Exhibit I

Form of Joinder Agreement

The undersigned hereby agrees, effective as of the date hereof, to become a party to that certain Third Amended and Restated Registration Rights Agreement, dated as of April 6, 2016 (as amended and/or restated from time to time, the "Agreement"), by and among Kala Pharmaceuticals, Inc., a Delaware corporation, and the parties named therein, and for all purposes of the Agreement, the undersigned shall be included within the term "Investor" (as defined in the Agreement).

INVESTOR:
[·]

By: _____
Name:
Title:

Date: _____

Address For Notice:

[Address]
[Address]
Tel: [ ]
Email: [ ]

LEASE AGREEMENT

THIS LEASE AGREEMENT (this "**Lease**") is made this 30th day of September, 2013, between **ARE-MA REGION NO. 9, LLC**, a Delaware limited liability company ("**Landlord**"), and **KALA PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**").

Building: 100 Beaver Street, Waltham, Massachusetts

Premises: That portion of the second floor of the Building, containing approximately 11,747 rentable square feet, as determined by Landlord, as shown on **Exhibit A**.

Project: The real property on which the Building in which the Premises are located, together with all improvements thereon and appurtenances thereto as described on **Exhibit B**.

Base Rent:

Months 1 — 12:	$28.50 per rentable square foot of the Premises per annum
Months 13 — 24:	$29.50 per rentable square foot of the Premises per annum
Months 25 — 36:	$30.50 per rentable square foot of the Premises per annum

Rentable Area of Premises: 11,747 sq. ft

Rentable Area of Project: 82,330 sq. ft. **Tenant's Share of Operating Expenses:** 14.27%

Security Deposit: $83,697.37

Target Commencement Date: February 1, 2014

Base Term: Beginning on the Commencement Date and ending 36 months from the first day of the first full month of the Term (as defined in Section 2) hereof.

Permitted Use: Research and development laboratory, related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment:
P.O. Box 975383
Dallas, TX 75397-5383

Landlord's Notice Address:
385 E. Colorado Boulevard, Suite 299
Pasadena, CA 91101
Attention: Corporate Secretary

Tenant's Notice Address Before the Commencement Date:
135 Beaver Street, Suite 309
Waltham, MA 02452
Attention: General Counsel

Tenant's Notice Address After the Commencement Date:
100 Beaver Street, Suite 201
Waltham, MA 02452
Attention: General Counsel

The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

x **EXHIBIT A** - PREMISES DESCRIPTION
x **EXHIBIT B** - DESCRIPTION OF PROJECT
x **EXHIBIT C** - WORK LETTER
x **EXHIBIT D** - COMMENCEMENT DATE
x **EXHIBIT E** - RULES AND REGULATIONS
x **EXHIBIT F** - TENANT'S PERSONAL PROPERTY
x **EXHIBIT G** - HAZARDOUS MATERIALS LIST

1. **Lease of Premises**. Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project which are for the non-exclusive use of tenants of the Project are collectively referred to herein as the "**Common Areas**," which shall include, but not be limited to, all common hallways, lobbies, bathrooms, corridors, walkways, elevators (including freight elevators), loading docks and dumpsters. Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant's use of the Premises for the Permitted Use. From and after the Commencement Date through the expiration of the Term, Tenant shall have access to the Building and the Premises 24 hours a day, 7 days a week, except in the case of emergencies, as the result of Legal Requirements, the performance by Landlord of any installation, maintenance or repairs, or any other temporary interruptions, and otherwise subject to the terms of this Lease.

2. **Delivery; Acceptance of Premises; Commencement Date**. Landlord shall use reasonable efforts to deliver the Premises to Tenant on or before the Target Commencement Date, with Landlord's Work Substantially Completed ("**Delivery**" or "**Deliver**"). If Landlord fails to timely Deliver the Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord does not Deliver the Premises within 45 days of the Target Commencement Date for any reason other than Force Majeure delays and Tenant Delays, this Lease may be terminated by Tenant by written notice to Landlord, and if so terminated by Tenant: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. As used herein, the terms "**Landlord's Work**," "**Tenant Delays**" and "**Substantially Completed**" shall have the meanings set forth for such terms in the Work Letter. If Tenant does not elect to void this Lease within 10 business days of the lapse of such 45 day period, such right to void this Lease shall be waived and this Lease shall remain in full

force and effect. Notwithstanding anything to the contrary contained herein, if Tenant does not terminate this Lease pursuant to the immediately preceding sentence, Base Rent shall be abated 1 day for each day after such 45 day period (as extended by Force Majeure delays and Tenant Delays) that the Premises are not Delivered to Tenant.

The "**Commencement Date**" shall be the earlier of: (i) the date Landlord Delivers the Premises to Tenant; and (ii) the date Landlord could have Delivered the Premises but for Tenant Delays; provided, however, in no event shall the Commencement Date occur prior to January 15, 2014. Upon request of Landlord, Landlord and Tenant shall execute and deliver a written acknowledgment of the Commencement Date, and the expiration date of the Term when such are established in the form of the "Acknowledgement of Commencement Date" attached to this Lease as **Exhibit D**; provided, however, Tenant's failure to execute and deliver such acknowledgment shall not affect Landlord's rights hereunder. The "**Term**" of this Lease shall be the Base Term, as defined above on the first page of this Lease and the Extension Term which Tenant may elect pursuant to Section 40 hereof.

Except as set forth in the Work Letter and as otherwise expressly set forth in this Lease: (i) Tenant shall accept the Premises in their condition as of the Commencement Date, subject to all applicable Legal Requirements (as defined in Section 7 hereof); (ii) Landlord shall have no obligation for any defects in the Premises; and (iii) Tenant's taking possession of the Premises shall be conclusive evidence that Tenant accepts the Premises. Any occupancy of the Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, including the obligation to pay Base Rent and Operating Expenses. Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties issued for the benefit of Landlord relating to the Tenant Improvements constructed in the Premises pursuant to the Work Letter.

For the period of 90 consecutive days after the Commencement Date, Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the structural portion of the Premises or Building Systems (as defined in Section 13) serving the Premises, unless Tenant or any Tenant Party was responsible for the cause of such repair, in which case Tenant shall pay the cost.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant's business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant's representations, warranties, acknowledgments and agreements contained herein.

3. **Rent.**

(a) **Base Rent**. The Security Deposit and the first month's Base Rent shall be due and payable on or before January 10, 2014. Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, equal monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

(b) **Additional Rent**. In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent ("**Additional Rent**"): (i) Tenant's Share of "Operating Expenses" (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. **Base Rent Adjustments.**

(a) **Annual Adjustment.** Base Rent shall be increased during the Base Term as provided for in the schedule set forth on page 1 of this Lease. Base Rent adjustments for any fractional calendar month shall be prorated.

(b) **TI Rent.** Landlord shall, subject to the terms of the Work Letter, make the Glasswasher Allowance (as defined in the Work Letter) available to Tenant. Commencing on the Commencement Date and continuing thereafter on the first day of each month during the Term, Tenant shall pay the amount necessary to fully amortize the portion of the Glasswasher Allowance actually funded by Landlord, if any, over 6 years in equal monthly payments with interest at a rate of 8% per annum ("**TI Rent**").

5. **Operating Expense Payments**. Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (the "**Annual Estimate**"), which may be revised by Landlord from time to time during such calendar year. During each month of the Term, on the

same date that Base Rent is due, Tenant shall pay Landlord an amount equal to 1/12th of Tenant's Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, Taxes (as defined in Section 9), reasonable reserves consistent with good business practice for future repairs and replacements, capital repairs and improvements amortized over the lesser of 10 years and the useful life of such capital items (as reasonably determined by Landlord taking into account relevant factors), and the costs of Landlord's third party property manager or, if there is no third party property manager, administration rent in the amount of 2.5% of Base Rent), excluding only:

(a) the original construction costs of the Project and renovation prior to the date of the Lease and costs of correcting defects in such original construction or renovation;

(b) capital expenditures for expansion of the Project;

(c) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured;

(d) depreciation of the Project (except for capital improvements, the cost of which are includable in Operating Expenses);

(e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;

(f) legal and other expenses incurred in the negotiation or enforcement of leases;

(g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;

(h) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;

(i) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(j) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(k) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(l) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);

(m) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;

(n) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;

(o) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project;

(p) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;

(q) costs incurred in the sale or refinancing of the Project;

(r) the cost of designing and constructing the Tenant Improvements in the Premises pursuant to the Work Letter;

(s) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein; and

(t) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 30 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 30 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses, Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Operating Expenses, then Tenant shall have the right to have an independent regionally recognized accounting firm selected by Tenant, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld or delayed), audit and/or

review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or

earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review. Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth on the first page of this Lease as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

6. **Security Deposit.** Tenant shall deposit with Landlord, on or before January 10, 2014, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth on page 1 of this Lease, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, future rent damages and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Landlord's right to use the Security Deposit under this Section 6 includes the right to use the Security Deposit to pay future rent damages following the termination of this Lease pursuant to Section 21(c) below. Upon any use of all or any portion of the Security Deposit, Tenant shall pay Landlord on demand the amount that will restore the Security Deposit to the amount set forth on Page 1 of this Lease. Tenant hereby waives the provisions of any law, now or hereafter in force which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that

Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. Upon any such use of all or any portion of the Security Deposit, Tenant shall, within 5 days after demand from Landlord, restore the Security Deposit to its original amount. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

7. **Use.** The Premises shall be used solely for the Permitted Use set forth in the basic lease provisions on page 1 of this Lease, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "**ADA**") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority (as defined in Section 9) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord promptly upon demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's use and/or occupancy of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment that would overload the floor in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord. Landlord hereby consents to the transport through the Common Areas and the placement within the Premises (in the locations reflected on the Space Plan (as defined in the Work Letter)) of the Tenant equipment reflected in the Space Plan pursuant to its determination that the same, as located as reflected in the Space Plan, is within the structural capacity of the floor of the Premises. Except as may be provided under the Work Letter, Tenant shall not, without the

prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

Landlord shall be responsible for the compliance of the Premises and the Common Areas of the Project with Legal Requirements as of the Commencement Date. Following the Commencement Date, Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar

buildings in the area in which the Project is located) and at Tenant's expense (to the extent such Legal Requirement is triggered by reason of Tenant's, as compared to other tenants of the Project, specific use of the Premises or Tenant's Alterations) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements. Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant's specific use or occupancy of the Premises or Tenant's Alterations. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys' fees, charges and disbursements and costs of suit) (collectively, "**Claims**") arising out of or in connection with Tenant's failure to comply with Legal Requirements applicable to Tenant's specific use or occupancy of the Premises or Tenant's Alterations, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement applicable to Tenant's specific use or occupancy of the Premises or Tenant's Alterations.

8. **Holding Over**. If, with Landlord's express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord may indicate, in Landlord's sole and absolute discretion, in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of Rent in effect during the last 30 days of the Term, and (B) Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant's holding over, including consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.

9. **Taxes.** Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind with respect to the Project, existing as of the Commencement Date or thereafter enacted (collectively referred to as "**Taxes**"), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, "**Governmental Authority**") during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or

gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord's business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord's determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. **Parking.** Subject to all matters of record, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Tenant shall have the right, at no additional cost to Tenant, in common with other tenants of the Project pro rata in accordance with the rentable area of the Premises and the rentable areas of the Project occupied by such other tenants, to park in those areas designated for non-reserved parking, subject in each case to Landlord's rules and regulations. As of the date of this Lease, Tenant's pro rata share of parking spaces is equal to 3.3 parking spaces per 1,000 rentable square feet of the Premises. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties, including other tenants of the Project.

11. **Utilities, Services.** Landlord shall provide, subject to the terms of this Section 11, water, electricity, heat, light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), refuse and trash collection and janitorial services (collectively, "**Utilities**"). Landlord shall pay, as Operating Expenses or subject to Tenant's reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Landlord may cause, at Landlord's expense, any Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever other than Landlord's willful misconduct, shall result in eviction or constructive eviction of Tenant, termination of this Lease or the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use.

Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be: (i) to provide emergency generators with not less than the capacity of the emergency generators located in the Building as of the Commencement Date, and (ii) to contract with a third party to maintain the emergency generators as per the manufacturer's standard maintenance guidelines. Landlord shall have no obligation to provide Tenant with operational emergency generators or back-up power or to supervise, oversee or confirm that the third party maintaining the emergency generators is maintaining the generators as per the manufacturer's standard guidelines or otherwise. During any period of replacement, repair or maintenance of the emergency generators when the emergency generators are not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative back-up generator or generators or alternative sources of back-up power. At least once per month as part of the maintenance of the Building, Landlord shall run the emergency generator for a period reasonably determined by Landlord for the purpose of determining whether it operates when started. Tenant expressly acknowledges and agrees that Landlord does not guaranty that such emergency generators will be operational at all times or that emergency power will be available to the Premises when needed.

12. **Alterations and Tenant's Property.** Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems (as defined in Section 13) ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems and shall not be otherwise unreasonably withheld, conditioned or delayed. Tenant may construct nonstructural cosmetic Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed $50,000 (a "**Notice-Only Alteration**"), provided Tenant notifies Landlord in writing of such intended Notice-Only Alteration, and such notice shall be accompanied by plans, specifications, work contracts and such other information concerning the nature and cost of the Notice-Only Alteration as may be reasonably requested by Landlord, which notice and accompanying materials shall be delivered to Landlord not less than 15 business days in advance of any proposed construction. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's sole and absolute discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, on demand an amount equal to 5% of all charges incurred by Tenant or its contractors or agents in connection with any Alteration to cover Landlord's overhead and expenses for plan review, coordination, scheduling and supervision. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Except for Removable Installations (as hereinafter defined), all Installations (as hereinafter defined) shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term, and shall remain upon and be surrendered with the Premises as a part thereof. Notwithstanding the foregoing, Landlord may, at the time its approval of any such Installation is requested, or at the time it receives notice of a Notice-Only Alteration, notify Tenant that Landlord requires that Tenant remove such Installation upon the expiration or earlier termination of the Term, in which event Tenant shall remove such Installation in accordance with the immediately succeeding sentence. Upon the expiration or earlier termination of the Term, Tenant shall remove (i) all wires, cables or similar equipment which Tenant has installed in the Premises or in the risers or plenums of the Building, (ii) any Installations for which Landlord has given Tenant notice of removal in accordance with the immediately preceding sentence, and (iii) all of Tenant's Property (as hereinafter defined), and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal, including, without limitation, capping off all such connections behind the walls of the Premises and repairing any holes. During any restoration period beyond the expiration or earlier termination of the Term, Tenant shall pay Rent to Landlord as provided herein as if said space were otherwise occupied by Tenant. If Landlord is requested by Tenant or any lender, lessor or other person or entity claiming an interest in any of Tenant's Property to waive any lien Landlord may have against any of Tenant's Property, and Landlord consents to such waiver, then Landlord shall be entitled to be paid as administrative rent a fee of $1,000 per occurrence for its time and effort in preparing and negotiating such a waiver of lien.

For purposes of this Lease, (x) "**Removable Installations**" means any items listed on **Exhibit F** attached hereto and any items agreed by Landlord in writing to be included on **Exhibit F** in the future, (y) "**Tenant's Property**" means Removable Installations and, other than Installations, any personal property or equipment of Tenant that may be removed without material damage to the Premises, and (z) "**Installations**" means all property of any kind paid for by Landlord, all Alterations, all fixtures, and all partitions, hardware, built-in machinery, built-in casework and cabinets and other similar additions, equipment, property and improvements built into the Premises so as to become an integral part of the Premises, including, without limitation, fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch.

13. **Landlord's Repairs.** Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's agents, servants, employees, invitees and contractors (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or

emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in case of emergency, make a commercially reasonable effort to give Tenant 72 hours advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section, after which Landlord shall make a commercially reasonable effort to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.

14. **Tenant's Repairs.** Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Such repair and replacement may include capital expenditures and repairs whose benefit may extend beyond the Term. Should Tenant fail to make any such repair or replacement or fail to

maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 business days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.

15. **Mechanic's Liens.** Tenant shall discharge, by bond or otherwise, any mechanic's lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 10 days after the filing thereof, at Tenant's sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. **Indemnification.** Tenant hereby indemnifies and agrees to defend, save and hold Landlord harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises, arising directly or indirectly out of use or occupancy of the Premises or a breach or default by Tenant in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or negligence of Landlord. Landlord shall not be

liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party.

17. **Insurance.** Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project or such lesser coverage amount as Landlord may elect provided such coverage amount is not less than 90% of such full replacement cost. Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than $2,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not such are made a part of the Project. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with such limits as required by law; and commercial general liability insurance, with a minimum limit of not less than $2,000,000 per occurrence for bodily injury and property damage with respect to the Premises. The commercial general liability insurance policy shall name Alexandria Real Estate Equities, Inc., and Landlord, its officers, directors, employees, managers and agents (collectively, "**Landlord Parties**"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer; contain a hostile fire endorsement and a contractual liability endorsement; and provide primary coverage to Landlord (any policy issued to Landlord providing duplicate or similar coverage shall be deemed excess over Tenant's policies). Certificates of insurance snowing the limits of coverage required hereunder and showing Landlord as an additional insured shall be delivered to Landlord by Tenant upon commencement of the Term and upon each renewal of said insurance. Tenant's policy shall include an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying

lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers and agents ("**Related Parties**"), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender and/or to bring coverage limits to levels then being generally required of new tenants within the Project.

18. **Restoration.** If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 45 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the "**Restoration Period**"). If the Restoration Period is estimated to exceed 9 months (the "**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. If Tenant has not exercised its Extension Right pursuant to Section 40, Tenant may also terminate this Lease by written notice to Landlord delivered within 5 business days after receipt of a notice estimating the date on which the Restoration Period is expected to occur if the Restoration Period is estimated by Landlord to be completed during the last 12 months of the Base Term. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration, or Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of: (i) discovery of such damage or destruction, or (ii) the date all required Hazardous

Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure (as defined in Section 34) events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease upon written notice to the other if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage; provided, however, that such notice is delivered within 10 business days after the date that Landlord provides Tenant with written notice of the estimated Restoration Period. Landlord shall also have the right to terminate this Lease if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space reasonably acceptable to Tenant during the period of repair that is suitable for the temporary conduct of Tenant's business. In the event that no Hazardous Material Clearances are required to be obtained by Tenant with respect to the Premises, rent abatement shall commence on the date of discovery of the damage or destruction. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate the Lease by reason of damage or casualty loss.

The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. **Condemnation.** If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a "**Taking**" or "**Taken**"), and the Taking would in Landlord's reasonable judgment, impair Landlord's ownership or operation of the Project or would in the reasonable judgment of Landlord and Tenant either prevent or materially interfere with Tenant's use of the Premises (as resolved, if the parties are unable to agree, by arbitration by a single arbitrator with the qualifications and experience appropriate to resolve the matter and appointed pursuant to and acting in accordance with the rules of the American Arbitration Association), then upon written notice by Landlord or Tenant to the other this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant's Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord's award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant's trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives

any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. **Events of Default.** Each of the following events shall be a default ("**Default**") by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 20 days before the expiration of the current coverage.

(c) **Abandonment.** Tenant shall abandon the Premises. Tenant shall not be deemed to have abandoned the Premises if (i) Tenant provides Landlord with reasonable advance notice prior to vacating and, at the time of vacating the Premises, Tenant completes Tenant's obligations with respect to the Surrender Plan in compliance with Section 28 (Tenant will not be required prepare another Surrender Plan at the expiration or earlier termination of the Term if Tenant does not re-enter the Premises following such abandonment), (ii) Tenant has made reasonable arrangements with Landlord for the security of the Premises for the balance of the Term, and (iii) Tenant continues during the balance of the Term to satisfy all of its obligations under the Lease as they come due.

(d) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(f) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 5 days after a second notice requesting such document.

(h) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 10 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 10 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 10 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 30 days from the date of Landlord's notice.

21. **Landlord's Remedies.**

(a) **Payment By Landlord; Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum of 6% of the overdue Rent as a late charge. Notwithstanding the foregoing, before assessing a late charge the first time in any calendar year, Landlord shall provide Tenant written notice of the delinquency and will waive the right if Tenant pays such delinquency within 5 days thereafter. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.

(c) **Remedies.** Upon the occurrence of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever. No cure in whole or in part of such Default by Tenant after Landlord has taken any action beyond giving Tenant notice of such Default to pursue any remedy provided for herein (including retaining counsel to file an action or otherwise pursue any remedies) shall in any way affect Landlord's right to pursue such remedy or any other remedy provided Landlord herein or under law or in equity, unless Landlord, in its sole discretion, elects to waive such Default.

(i) This Lease and the Term and estate hereby granted are subject to the limitation that whenever a Default shall have happened and be continuing, Landlord shall have the right, at its election, then or thereafter while any such Default shall continue and notwithstanding the fact that Landlord may have some other remedy hereunder or at law or in equity, to give Tenant written notice of Landlord's intention to terminate this Lease on a date specified in such notice, which date shall be not less than 5 days after the giving of such notice, and upon the date so specified, this Lease and the estate hereby granted shall expire and terminate with the same force and effect as if the date specified in such notice were the date hereinbefore fixed for the expiration of this Lease, and all right of Tenant hereunder shall expire and terminate, and Tenant

shall be liable as hereinafter in this Section 21(c) provided. If any such notice is given, Landlord shall have, on such date so specified, the right of re-entry and possession of the Premises and the right to remove all persons and property therefrom and to store such property in a warehouse or elsewhere at the risk and expense, and for the account, of Tenant. Should Landlord elect to re-enter as herein provided or should Landlord take possession pursuant to legal proceedings or pursuant to any notice provided for by law, Landlord may from time to time re-let the Premises or any part thereof for such term or terms and at such rental or rentals and upon such terms and conditions as Landlord may deem advisable, with the right to make commercially reasonable alterations in and repairs to the Premises.

(ii) In the event of any termination of this Lease as in this Section 21 provided or as required or permitted by law or in equity, Tenant shall forthwith quit and surrender the Premises to Landlord, and Landlord may, without further notice, enter upon, re-enter, possess and repossess the same by summary proceedings, ejectment or otherwise, and again have, repossess and enjoy the same as if this Lease had not been made, and in any such event Tenant and no person claiming through or under Tenant by virtue of any law or an order of any court shall be entitled to possession or to remain in possession of the Premises. Landlord, at its option, notwithstanding any other provision of this Lease, shall be entitled to recover from Tenant, as and for liquidated damages, the sum of:

(A) all Base Rent, Additional Rent and other amounts payable by Tenant hereunder then due or accrued and unpaid: and

(B) the amount equal to the aggregate of all unpaid Base Rent and Additional Rent which would have been payable if this Lease had not been terminated prior to the end of the Term then in effect, discounted to its then present value in accordance with accepted financial practice using a rate of 5% per annum, for loss of the bargain; and

(C) all other damages and expenses (including attorneys' fees and expenses), if any, which Landlord shall have sustained by reason of the breach of any provision of this Lease; less

(D) the net proceeds of any re-letting actually received by Landlord and the amount of damages which Tenant proves could have been avoided had Landlord taken reasonable steps to mitigate its damages.

(iii) Nothing herein contained shall limit or prejudice the right of Landlord, in any bankruptcy or insolvency proceeding, to prove for and obtain as liquidated damages by reason of such termination an amount equal to the maximum allowed by any bankruptcy or insolvency proceedings, or to prove for and obtain as liquidated damages by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law, but in each case not more than the amount to which Landlord would otherwise be entitled under this Section 21.

(iv) Nothing in this Section 21 shall be deemed to affect the right of either party to indemnifications pursuant to this Lease.

(v) If Landlord terminates this Lease upon the occurrence of a Default, Tenant will quit and surrender the Premises to Landlord or its agents, and Landlord may, without further notice, enter upon, re-enter and repossess the Premises by summary proceedings, ejectment or otherwise. The words "enter", "re-enter", and "re-entry" are not restricted to their technical legal meanings.

(vi) If either party shall be in default in the observance or performance of any provision of this Lease, and an action shall be brought for the enforcement thereof, the non-prevailing party shall pay to the prevailing party all fees, costs and other expenses which may become payable as a result thereof or in connection therewith, including attorneys' fees and expenses.

(vii) If Tenant shall default in the keeping, observance or performance of any covenant, agreement, term, provision or condition herein contained, Landlord, without thereby waiving such default, may perform the same for the account and at the expense of Tenant (a) immediately or at any time thereafter and without notice in the case of emergency or in case such default will result in a violation of any legal or insurance requirements, or in the imposition of any lien against all or any portion of the Premises (but only after Tenant has failed to respond to such lien as permitted by Section 15 within the time period provided in Section 15), and (b) in any other case if such default continues after any applicable notice and cure period provided in Section 21. All reasonable costs and expenses incurred by Landlord in connection with any such performance by it for the account of Tenant and also all reasonable costs and expenses, including attorneys' fees and disbursements incurred by Landlord in any action or proceeding (including any summary dispossess proceeding) brought by Landlord to enforce any obligation of Tenant under this Lease and/or right of Landlord in or to the Premises, shall be paid by Tenant to Landlord within 10 days after demand.

(viii) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 30(d), at Tenant's expense, to the extent provided in Section 30(d).

(ix) In the event that Tenant is in breach or Default under this Lease, whether or not Landlord exercises its right to terminate or any other remedy, Tenant shall reimburse Landlord upon demand for any costs and expenses that Landlord may incur in connection with any such breach or Default, as provided in this Section 21(c). Such costs shall include legal fees and costs incurred for the negotiation of a settlement, enforcement of rights or otherwise. Tenant shall also indemnify Landlord against and hold Landlord harmless from all costs, expenses, demands and liability, including without limitation, legal fees and costs Landlord shall incur if Landlord shall become or be made a party to any claim or action instituted by Tenant against any third party, or by any third party against Tenant, or by or against any person holding any interest under or using the Premises by license of or agreement with Tenant.

Except as otherwise provided in this Section 21, no right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and every right and remedy shall be cumulative and in addition to any other legal or equitable right or remedy given hereunder, or now or hereafter existing. No waiver of any provision of this Lease shall be deemed to have been made unless expressly so made in writing. Landlord shall be entitled, to the extent permitted by law, to seek injunctive relief in case of the violation, or attempted or threatened violation, of any provision of this Lease, or to seek a decree compelling observance or performance of any provision of this Lease, or to seek any other legal or equitable remedy.

22. **Assignment and Subletting.**

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in Section 22(b) below, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt

to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 25% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22. Notwithstanding the foregoing, Tenant shall have the right to obtain financing from institutional investors (including venture capital funding and corporate partners) which regularly invest in private biotechnology companies or undergo a public offering which results in a change in control of Tenant without such change of control constituting an assignment under this Section 22 requiring Landlord consent, provided that (i) Tenant notifies Landlord in writing of the financing at least 5 business days prior to the closing of the financing, and (ii) provided that in no event shall such financing result in a change in use of the Premises from the use contemplated by Tenant at the commencement of the Term.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises other than pursuant to a Permitted Assignment (as defined below), then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed

assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent, (ii) refuse such consent, in its reasonable discretion; or (iii) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an "**Assignment Termination**"). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord's reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord; (3) in Landlord's reasonable judgment, the proposed assignee or subtenant is engaged in areas of scientific research or other business concerns that are controversial; (4) in Landlord's reasonable judgment, the proposed assignee or subtenant lacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord's reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord's experience with the proposed assignee or subtenant; (7) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant, or any entity that, directly or indirectly, controls, is controlled by, or is under common control with the proposed assignee or subtenant, is then an occupant of the Project; (10) the proposed assignee or subtenant is an entity with whom Landlord is negotiating to lease space in the Project; or (11) the assignment or sublease is prohibited by Landlord's lender. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the

right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord's notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord's consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to One Thousand Five Hundred Dollars ($1,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, Tenant shall have the right to assign this Lease, upon 10 days prior written notice to Landlord (unless Tenant is prohibited from providing such notice by confidentiality or Legal Requirements in which case Tenant shall notify Landlord promptly thereafter) but without obtaining Landlord's prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring the Lease, and (ii) as of the date that is 1 day after the Permitted Assignment, the net worth (as determined in accordance with generally accepted accounting principles ("**GAAP**")) of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant's most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease arising after the effective date of the assignment (a "**Permitted Assignment**").

(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under the Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the Rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the Rent payable under this Lease, (excluding however, any Rent payable under this Section) ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under the Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. **Estoppel Certificate.** Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Notwithstanding the foregoing, in no event shall Tenant be required to make any statement or certification that Tenant reasonably determines contains misstatements of material facts. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within such time shall, at the option of Landlord, constitute a Default under this Lease, and, in any event, shall be conclusive upon Tenant that the Lease is in full force

and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

24. **Quiet Enjoyment.** So long as Tenant is not in Default under this Lease, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. **Prorations.** All prorations required or permitted to be made hereunder shall be made on the basis of a 360 day year and 30 day months.

26. **Rules and Regulations.** Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. The current rules and regulations are attached hereto as **Exhibit E**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. **Subordination.** This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Tenant hereby appoints Landlord attorney-in-fact for Tenant irrevocably (such power of attorney being coupled with an interest) to execute, acknowledge and deliver any such instrument and instruments for and in the name of Tenant and to cause any such instrument to be recorded. Notwithstanding the foregoing, any such Holder may at any time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. Notwithstanding the foregoing, in no event shall Tenant be required to execute any instruments pursuant to this Section 27 which Tenant reasonably determines contains misstatements of material facts in which case Tenant shall immediately notify Landlord in writing of the existence of such misstatements of material facts. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "**Holder**" of a Mortgage shall be deemed to include the beneficiary under a deed of trust.

28. **Surrender.** Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same condition as received, subject to any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord Party (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of

the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Surrender Plan**"). Such Surrender Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Surrender Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Surrender Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of the Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual out-of pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Surrender Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed $5,000. Landlord shall have the unrestricted right to deliver such Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. **Waiver of Jury Trial.** TO THE EXTENT PERMITTED BY LAW, TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS RELATED HERETO.

30. **Environmental Requirements.**

(a) **Prohibition/Compliance/Indemnity.** Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses (collectively, "**Environmental Claims**") which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project.

(b) **Business.** Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises ("**Hazardous Materials List**"). Tenant shall deliver to Landlord an updated Hazardous Materials List at least once a year and shall also deliver an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises. Tenant shall deliver to Landlord true and correct copies of the following documents (the "**Haz Mat Documents**") relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that

time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Surrender Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information which could be detrimental to Tenant's business should such information become possessed by Tenant's competitors. Notwithstanding anything to the contrary contained herein, Tenant has advised Landlord that the Hazardous Materials List attached to this Lease as **Exhibit G** reflects the type and quality of Hazardous Materials that Tenant will initially be using in the Premises and Landlord acknowledges and agrees that the Hazardous Materials List attached hereto as **Exhibit G** fulfills Tenant's obligation to deliver a Hazardous Materials List pursuant to the second sentence of this paragraph.

(c) **Tenant Representation and Warranty.** Tenant hereby represents and warrants to Landlord that (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant of such predecessor or resulted from Tenant's or such predecessor's action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling,

treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord's sole and absolute discretion.

(d) **Testing.** Landlord shall have the right to conduct annual tests of the Premises to determine whether any contamination of the Premises or the Project has occurred as a result of Tenant's use. Tenant shall be required to pay the cost of such annual test of the Premises if there is violation of this Section 30 or if contamination for which Tenant is responsible under this Section 30 is identified; provided, however, that if Tenant conducts its own tests of the Premises using third party contractors and test procedures acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the annual tests to be paid for by Tenant. In addition, at any time, and from time to time, prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises and the Project to determine if contamination has occurred as a result of Tenant's use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. If contamination has occurred for which Tenant is liable under this Section 30, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests (which shall not constitute an Operating Expense). Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

(e) **Control Areas.** Tenant shall be allowed to utilize up to its pro rata share of the Hazardous Materials inventory within any control area or zone (located within the Premises), as designated by the applicable building code, for chemical use or storage. As used in the preceding sentence, Tenant's pro rata share of any control areas or zones located within the Premises shall be determined based on the rentable square footage that Tenant leases within the applicable control area or zone. For purposes of example only, if a control area or zone contains 10,000 rentable square feet and 2,000 rentable square feet of a tenant's premises are located within such control area or zone (while such premises as a whole contains 5,000 rentable square feet), the applicable tenant's pro rata share of such control area would be 20%.

(f) **Underground Tanks.** If underground or other storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks.

(g) **Tenant's Obligations.** Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Surrender Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(h) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "**Hazardous Materials**" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "**operator**" of Tenant's "**facility**" and the "**owner**" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. **Tenant's Remedies/Limitation of Liability.** Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should

prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.

All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term "**Landlord**" in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner's ownership.

32. **Inspection and Access.** Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord's representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last year of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Premises stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant's use or occupancy of the Premises for the Permitted Use. At Landlord's request, Tenant shall execute such instruments as may be necessary for such

easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord's access rights hereunder.

33. **Security.** Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant's officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant's cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

34. **Force Majeure.** Landlord shall not be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond the reasonable control of Landlord ("**Force Majeure**").

35. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with this transaction and that no

Broker brought about this transaction, other than Cushman & Wakefield and NAI Hunneman Commercial. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than the broker, if any named in this Section 35, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction. Landlord shall be responsible for all commissions due to Cushman & Wakefield and NAI Hunneman Commercial arising out of the execution of this Lease in accordance with the terms of a separate written agreements between Cushman & Wakefield and NAI Hunneman Commercial and Landlord. Tenant shall not be required to pay any commissions to Cushman & Wakefield and NAI Hunneman Commercial in connection with this Lease.

36. **Limitation on Landlord's Liability.** NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

37. **Severability.** If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.

38. **Signs; Exterior Appearance.** Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project

any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Premises. Signage on the second floor and the lobby directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at Tenant's cost, and shall be of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The lobby directory tablet shall be provided exclusively for the display of the name and location of tenants.

39. **Right to Expand.**

(a) **Expansion in the Building.** Tenant shall, during the Base Term, have the one-time right, but not the obligation, to expand the Premises (the "**Expansion Right**") to include any Available Space in the Building upon the terms and conditions set forth in this Section. For purposes of this Section 39(a), "**Available Space**" shall mean the balance of the rentable square footage in the Building not already included as part of the Premises, which is not occupied by a tenant or which is occupied by an existing tenant whose lease is expiring within 6 months or less and such tenant does not wish to renew (whether or not such tenant has a right to renew) its occupancy of such space. If there is any Available Space in the Building, Landlord shall, at such time as Landlord shall elect so long as Tenant's rights hereunder are preserved, deliver to Tenant written notice (the "**Expansion Notice**") of such Available Space, together with the terms and conditions on which Landlord is prepared to lease Tenant such Available Space; provided that Base Rent shall be at the Market Rate (as defined in Section 40(a) below) for such Available Space. Tenant shall be entitled to exercise its right under this Section 39(a) only with respect to the entire Available Space described in such Expansion Notice ("**Identified Available Space**"). Tenant shall have 5 business days following delivery of the Expansion Notice to deliver to Landlord written

notification of Tenant's exercise of the Expansion Right with respect to the Identified Available Space ("**Exercise Notice**"). Tenant shall be entitled to lease such Identified Available Space upon the terms and conditions set forth in the Expansion Notice. If Landlord and Tenant are unable to agree on the Market Rate for the Available Space after negotiating in good faith within 5 days after Tenant's delivery of an Exercise Notice, the applicable Market Rate will be determined through arbitration in accordance with Section 40(b). Tenant acknowledges and agrees that, if Tenant has delivered an Exercise Notice pursuant to this Section 39(a), Tenant shall have no right thereafter to rescind or elect not to lease the Available Space. Tenant acknowledges that the Term of the Lease with respect to the Identified Available Space may not be co-terminous with the Term of the Lease with respect to the original Premises. Notwithstanding anything to the contrary contained herein, Tenant shall have no right to exercise the Expansion Right and the provisions of this Section 39(a) shall no longer apply after the date that is 9 months prior to the expiration of the Base Term if Tenant has not exercised its Extension Right pursuant to Section 40. If Tenant fails to deliver an Exercise Notice to Landlord for the Identified Available Space within the required 5 business day period, Tenant shall be deemed to have forever waived its rights under this Section 39(a) to lease the Identified Available Space, and Landlord shall have the right to lease the Identified Available Space to any third party on any terms and conditions acceptable to Landlord.

(b) **Amended Lease.** If: (i) Tenant fails to timely deliver an Exercise Notice, or (ii) after the expiration of a period of 10 days from the date Tenant gives notice accepting Landlord's offer to lease such Identified Available Space, no lease amendment or lease agreement for the Identified Available Space has been executed, and Landlord tenders to Tenant an amendment to this Lease setting forth the terms for the rental of the Identified Available Space consistent with those set forth in the Expansion Notice and otherwise consistent with the terms of this Lease and Tenant fails to execute such Lease amendment within 10 business days following such tender, Tenant shall be deemed to have forever waived its right to lease such Identified Available Space.

(c) **Exceptions.** Notwithstanding the above, the Expansion Right shall, at Landlord's option, not be in effect and may not be exercised by Tenant:

(i) during any period of time that Tenant is in Default under any provision of the Lease; or

(ii) if Tenant has been in Default under any provision of the Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period prior to the date on which Tenant seeks to exercise the Expansion Right.

(d) **Termination.** The Expansion Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Expansion Right, if, after such exercise, but prior to the commencement date of the lease of such Identified Available Space, (i) Tenant fails to timely cure any default by Tenant under the Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Expansion Right to the date of the commencement of the lease of the Identified Available Space, whether or not such Defaults are cured.

(e) **Rights Personal.** The Expansion Right is personal to Tenant and are not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease.

(f) **No Extensions.** The period of time within which the Expansion Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Expansion Right.

40. **Right to Extend Term.** Tenant shall have the right to extend the Term of the Lease upon the following terms and conditions:

(a) **Extension Rights.** Tenant shall have 1 right (an "**Extension Right**") to extend the term of this Lease for 2 years (an "**Extension Term**") on the same terms and conditions as this Lease (other than with respect to Base Rent **and the Work Letter**) by giving Landlord written notice of its election to exercise the Extension Right at least 9 months prior to the expiration of the Base Term of the Lease.

Upon the commencement of the Extension Term, Base Rent for the first year of the Extension Term shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of the Extension Term by a percentage as determined by Landlord and agreed to by Tenant at the time the Market Rate is determined. As used herein, "**Market Rate**" shall mean shall mean the then market rental rate, as determined by Landlord and agreed to by Tenant, for laboratory space in the Waltham market of comparable size, quality, and location as the Premises, taking into account all relevant factors.

If, on or before the date which is 180 days prior to the expiration of the Base Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate and the rent escalations during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 40(b). Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 40(a). Tenant shall have no right thereafter to rescind or elect not to extend the term of the Lease for the Extension Term.

(b) **Arbitration.**

(i) Within 10 days of Tenant's notice to Landlord of its election (or deemed election) to arbitrate Market Rate and escalations, each party shall deliver to the other a proposal containing the Market Rate and escalations that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent and escalations for the Extension Term.

If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate and escalations. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

(ii) The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator

panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate and escalations are not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by 3% until such determination is made. After the determination of the Market Rate and escalations, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate and escalations for the Extension Term.

(iii) An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater Waltham metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater Waltham metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant and is not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in the Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall, at Landlord's option, not be in effect and Tenant may not exercise the Extension Right:

(i) during any period of time that Tenant is in Default under any provision of this Lease; or

(ii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease; or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

41. **Miscellaneous.**

(a) **Notices.** All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability.** If and when included within the term "Tenant," as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information.** Tenant shall furnish Landlord with true and complete copies of (i) Tenant's most recent audited annual financial statements within 90 days of the end of each of Tenant's fiscal years during the Term, (ii) Tenant's most recent unaudited quarterly financial statements within 45 days of the end of each of Tenant's first three fiscal quarters of each of Tenant's fiscal years during the Term, (iii) at Landlord's request from time to time, updated business plans, including cash flow projections and/or pro forma balance sheets and income statements, all of which shall be treated by Landlord as confidential information belonging to Tenant, (iv) corporate brochures and/or profiles prepared by Tenant for prospective investors, and (v) any other financial information or summaries that Tenant typically provides to its lenders or shareholders. Notwithstanding the foregoing, in no event shall Tenant be required to provide any financial information to Landlord which Tenant does not otherwise prepare (or cause to be prepared) for its own purposes. So long as Tenant is a "public company" and its financial information is publicly available, then the foregoing delivery requirements of this Section 41(c) shall not apply. Landlord shall treat Tenant's financial information as confidential information belonging to Tenant. Landlord may, however, disclose Tenant's financial information to Landlord's auditors, attorneys, consultants, lenders and prospective purchasers; provided, however, that Landlord advises such parties of the confidentiality of such information.

(d) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.

(e) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to

Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(j) **OFAC.** Tenant, and all beneficial owners of Tenant, are currently (a) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **Entire Agreement.** This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and discussions, whether oral or written, of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

(m) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.

(n) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or

services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

[Signatures on next page]

IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

KALA PHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ Guillaume Pfefer
Its: President and CEO

LANDLORD:

ARE-MA REGION NO. 9, LLC,
a Delaware limited liability company

By: ARE-MA REGION NO. 9MM, LLC, a Delaware limited liability company, manager

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P., a Delaware limited partnership, its member

By: ARE-QRS CORP., a Maryland corporation, general partner

By: /s/ Eric S. Johnson
Eric S. Johnson
Its: Vice President
Real Estate Legal Affairs

EXHIBIT A TO LEASE

DESCRIPTION OF PREMISES

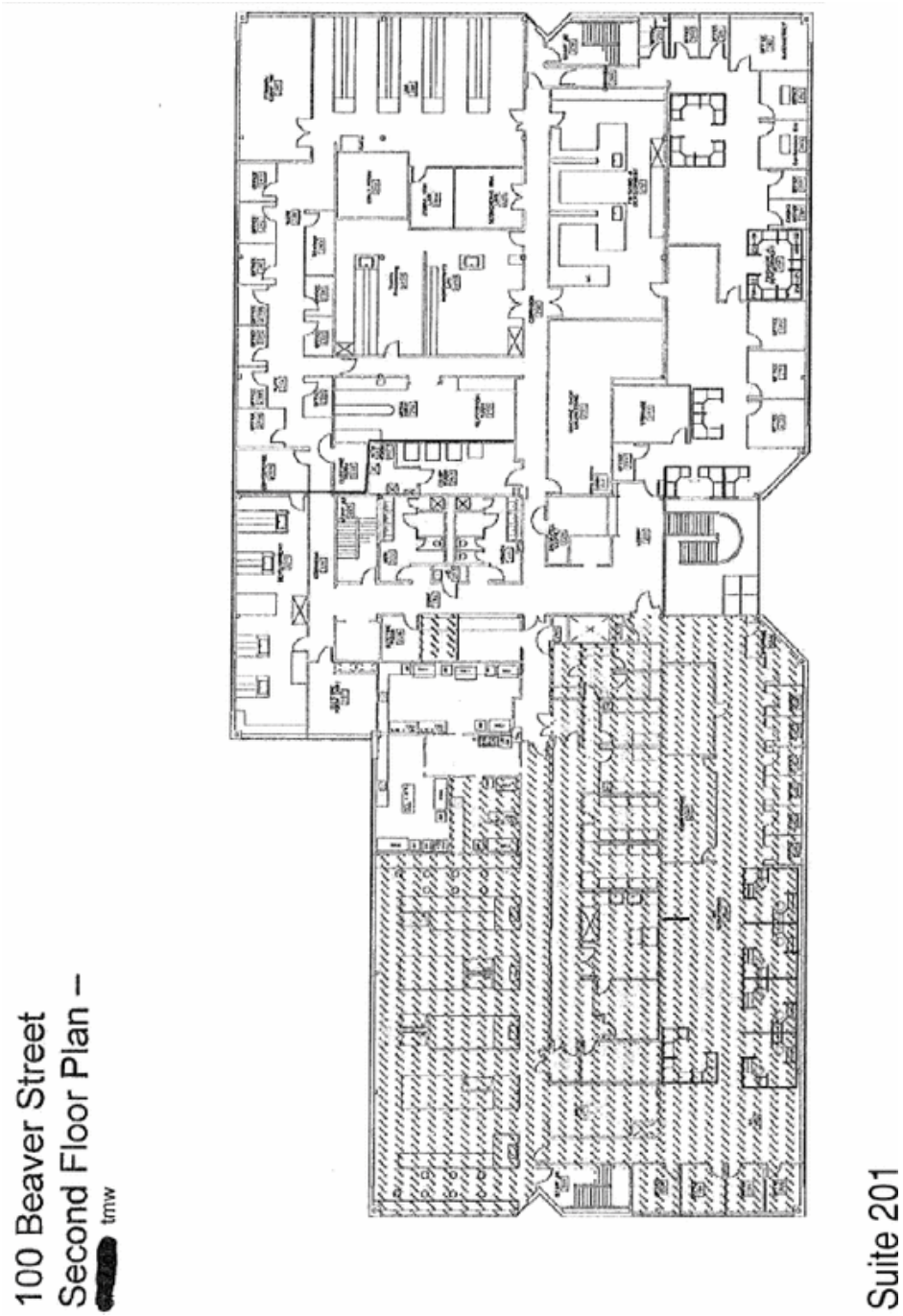

EXHIBIT B TO LEASE

DESCRIPTION OF PROJECT

The land with the buildings and improvements thereon known as and numbered 100 Beaver Street, Waltham, Middlesex County, Massachusetts more fully bounded and described as follows:

A certain parcel of land with buildings thereon situated on Beaver Street in the City of Waltham, Middlesex County, Massachusetts, being shown as Lot 2 on a plan entitled, “Subdivision Plan of Land, Waltham, Mass.”, dated March 28, 1985, R.E. Cameron & Associates, Inc., C.E.’s, recorded in Middlesex South Registry of Deeds, Book 16248, Page 282, bounded and described as follows:

SOUTHERLY	by the centerline of a way shown on said plan as “Parsons Avenue, 40ft. wide – Unimproved”, 673.53 ft.;
WESTERLY	by Lot 1, as shown on said plan, 220.28 ft.;
NORTHERLY	by a 30 ft. wide right of way, as shown on said plan 663.20 ft.;
EASTERLY	by Beaver Street, as shown on said plan 169.22 ft.;
SOUTHEASTERLY	by land of owners unknown 176.43 ft. as shown on said plan.

EXHIBIT C TO LEASE

WORK LETTER

THIS WORK LETTER dated September 30, 2013 (this "**Work Letter**") is made and entered into by and between **ARE-MA REGION NO. 9, LLC**, a Delaware limited liability company ("**Landlord**"), and **KALA PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease Agreement dated September 30, 2013 (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. **General Requirements.**

(a) **Tenant's Authorized Representative.** Tenant designates Kathy Rizzo and Guillaume Pfefer (either such individual acting alone, "**Tenant's Representative**") as the only persons authorized to act for Tenant pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication (collectively, "**Communication**") from or on behalf of Tenant in connection with this Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change either Tenant's Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's contractors in the performance of Landlord's Work (as hereinafter defined).

(b) **Landlord's Authorized Representative.** Landlord designates Tim White and Dawn Leaman (either such individual acting alone, "**Landlord's Representative**") as the only persons authorized to act for Landlord pursuant to this Work Letter. Tenant shall not be obligated to respond to or act upon any Communication from or on behalf of Landlord in connection with this Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord's Representative shall be the sole persons authorized to direct Landlord's contractors in the performance of Landlord's Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that: (i) TRG Builders shall be the general contractor for the Tenant Improvements, (ii) any subcontractors for the Tenant Improvements shall be selected by Landlord, subject to Tenant's approval, which approval shall not be unreasonably withheld, conditioned or delayed, and (iii) ArchDesign shall be the architect (the "**TI Architect**") for the Tenant Improvements.

2. **Tenant Improvements.**

(a) **Tenant Improvements Defined.** As used herein, "**Tenant Improvements**" shall mean all improvements to the Project of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below. Other than Landlord's Work (as defined in Section 3(a) below, Landlord shall not have any obligation whatsoever with respect to the finishing of the Premises for Tenant's use and occupancy.

(b) **Tenant's Space Plans.** Landlord and Tenant acknowledge and agree that the plan prepared by the TI Architect attached hereto as **Schedule 1** (the "**Space Plan**") has been approved by both Landlord and Tenant.

(c) **Working Drawings.** Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Tenant Improvements ("**TI Construction Drawings**"), which TI Construction Drawings shall be prepared substantially in accordance with the Space Plan. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant's requirements for the Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 business days after Tenant's receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the Space Plan without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 business days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant's review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the Space Plan, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below).

(d) **Approval and Completion.** It is hereby acknowledged by Landlord and Tenant that the TI Construction Drawings must be completed and approved not later than October 15, 2013, in order for the Landlord's Work to be Substantially Complete by the Target Commencement Date (as defined in the Lease). Upon any dispute regarding the design of the Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord's and Tenant's positions with respect to such dispute, (ii) that all costs and expenses resulting from any such decision by Tenant shall be payable by Tenant, and (iii) Tenant's decision will not affect the base Building, structural components of the Building or any Building systems. Any changes to the TI Construction Drawings following Landlord's and Tenant's approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. **Performance of Landlord's Work.**

(a) **Definition of Landlord's Work.** As used herein, "**Landlord's Work**" shall mean the work of constructing and completing the Tenant Improvements.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Tenant Improvements upon obtaining a building permit (the "**TI Permit**") authorizing the construction of the Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. The cost of obtaining the TI Permit shall be payable by Landlord. Tenant shall assist Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over Landlord's Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord's obligations hereunder, (ii) increase the cost of constructing Landlord's Work, or (iii) will materially delay the construction of Landlord's Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such terms and conditions provided; however, that such terms and conditions do not constitute material changes to the TI Construction Drawings and that the cost of such terms and conditions shall be the responsibility of Landlord.

(c) **Completion of Landlord's Work.** Landlord shall substantially complete or cause to be substantially completed Landlord's Work in a good and workmanlike manner, in accordance with the TI Permit subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with the use of the Premises and shall obtain a certificate or temporary certificate of occupancy (or an equivalent approval) for the Premises permitting lawful occupancy of the Premises during the Term (but specifically excluding any permits, licenses or other governmental approvals required to be obtained in connection with Tenant's operations in the Premises not relating to Landlord's Work)("**Substantial Completion**" or "**Substantially Complete**"). Upon Substantial Completion of Landlord's Work, Landlord shall require the TI Architect and the general contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects ("**AIA**") document G704. For purposes of this Work Letter, "**Minor Variations**" shall mean any modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to Landlord's Work; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments in accordance with good design, engineering, and construction practices for field deviations or conditions encountered during the construction of Landlord's Work.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's sole and absolute subjective discretion, provided that such material or structure shall be consistent with existing Building standard materials and/or structures, as applicable. As to all building materials and equipment that Landlord is obligated to supply under this Work Letter, Landlord shall select the manufacturer thereof in its sole and absolute subjective discretion.

(e) **Delivery of the Premises.** When Landlord's Work is Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Premises. Tenant's taking possession and acceptance of the Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers), (ii) any non-compliance of Landlord's Work with applicable Legal Requirements, or (iii) any claim that Landlord's Work was not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period, in which case Landlord shall continue to use reasonable efforts to remedy such Construction Defect .

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be borne solely by Tenant. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

(f) **Commencement Date Delay.** Except as otherwise provided in the Lease, Delivery of the Premises shall occur when Landlord's Work has been Substantially Completed, except to the extent

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that completion of Landlord's Work shall have been actually delayed by any one or more of the following causes in which case the Target Commencement Date shall be extended ("**Tenant Delay**"):

(i) Tenant's Representative was not available within 2 business days to give or receive any Communication or to take any other action required to be taken by Tenant hereunder;

(ii) Tenant's request for Change Requests (as defined in Section 4(a) below) to the extent that they actually result in a delay of Landlord's Work, whether or not any such Change Requests are actually performed;

(iii) Construction of any Change Requests;

(iv) Tenant's request for materials, finishes or installations requiring unusually long lead times to the extent they actually result in a delay of Landlord's Work, provided that promptly after Landlord learns of such long lead time items, Landlord informs Tenant that the requested items will require unusually long lead times;

(v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein;

(vi) Tenant's delay in providing information critical to the normal progression of the Project. Tenant shall provide such information as soon as reasonably possible, but in no event longer than one week after receipt of any request for such information from Landlord;

(vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(b) below); or

(viii) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons that continues for more than 2 days after Landlord's notice thereof to Tenant.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Tenant Improvements would have been Substantially Completed but for such Tenant Delay and such certified date shall be the date of Delivery.

4. **Changes.** Any changes requested by Tenant to the Space Plan attached to this Work Letter or after the delivery and approval by Landlord and Tenant of the TI Construction Drawings, any changes by Tenant to the TI Construction Drawings, shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Tenant Improvements that are not reflected in the Space Plan or TI Construction Drawings, as applicable ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request

(which costs shall be paid by Tenant to the extent actually incurred, whether or not such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant: (i) approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, and (ii) deposits with Landlord any Excess TI Costs required in connection with such Change, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. **Costs.**

(a) **TI Costs.** Landlord shall be solely responsible for the payment of all design, permits and construction and related costs and expenses in connection with the construction of the Tenant Improvements, including, without limitation, the cost of preparing the TI Construction Drawings and the Space Plans and Landlord's out-of-pocket expenses (collectively, "**TI Costs**"). Notwithstanding anything to the contrary contained herein, in no event shall Landlord be required to pay for any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, Tenant's voice or data cabling, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Tenant Improvements (collectively "**FF&E**"), which FF&E shall be at Tenant's option and cost.

(b) **Excess TI Costs.** Notwithstanding anything to the contrary contained herein, Tenant acknowledges and agrees that Landlord shall have no responsibility for any costs arising from or related to (i) Tenant's changes to the Space Plan, (ii) Tenant's changes to the TI Construction Drawings approved pursuant to Section 2(d) hereof, (iii) Tenant Delays, and (iv) the cost of Changes and Change Requests (collectively, "**Excess TI Costs**"); provided, however, Tenant shall only be responsible for the same to the extent of any net increase in the actual cost of the Tenant Improvements. Notwithstanding anything to the contrary contained herein, Tenant shall also be responsible for any and all costs relating to the purchase and installation of the Glasswasher (as defined below), provided that Tenant shall have the right, but not the obligation, to use the Glasswasher Allowance to pay for such costs. Upon Landlord's request from time to time, Tenant shall deposit with Landlord, as a condition precedent to Landlord's obligation to complete the Tenant Improvements, 100% of the Excess TI Costs. If Tenant fails to deposit the Excess TI Costs with Landlord, Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including, but not limited to, the right to interest at the Default Rate and the right to assess a late charge). For purposes of any litigation instituted with regard to such amounts, those amounts will be deemed Rent under the Lease.

(c) **Glasswasher Allowance.** Landlord shall provide to Tenant an allowance of up to $50,000 in the aggregate ("**Glasswasher Allowance**") for the purchase and installation of a glasswasher, reasonably acceptable to Landlord and Tenant ("**Glasswasher**") in the Premises. Tenant shall notify Landlord how much, if any, Glasswasher Allowance Tenant has elected to receive from Landlord within 30 days after the mutual execution and delivery of the Lease by the parties. Such election shall be final

and binding on Tenant, and may not thereafter be modified without Landlord's consent, which may be granted or withheld in Landlord's sole and absolute subjective discretion. If Tenant elects to use any portion of the Glasswasher Allowance, Tenant shall be responsible for all costs of the Glasswasher in excess of the Glasswasher Allowance. Tenant shall have no right to the use or benefit (including any reduction to or payment of Base Rent) of any portion of the Glasswasher Allowance not required for the purchase and installation of the Glasswasher. Any portion of the Glasswasher Allowance actually disbursed shall, to the extent used, result in TI Rent as set forth in the Lease. If all or any portion of the Glasswasher Allowance is used to purchase or install the Glasswasher, the Glasswasher shall be the property of Landlord and Tenant shall not remove the Glasswasher at the expiration or earlier termination of the Term, nor shall Tenant have the right to remove the Glasswasher from the Premises at any time during the Term.

6. **Tenant Access.**

(a) **Tenant's Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant's sole risk and expense, to the Building (i) 30 days prior to the Commencement Date to install Tenant's voice and data cabling, telecommunications and other equipment, and to perform any work required by Tenant other than Landlord's Work (collectively, "**Tenant's Work**"), provided that such Tenant's Work is coordinated with the TI Architect and the general contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of Landlord's Work, to inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Notwithstanding the foregoing, Tenant shall have no right to enter onto the Premises or the Project unless and until Tenant shall deliver to Landlord evidence reasonably satisfactory to Landlord demonstrating that any insurance reasonably required by Landlord in connection with such pre-commencement access (including, but not limited to, any insurance that Landlord may require pursuant to the Lease) is in full force and effect. Any entry by Tenant shall comply with all established safety practices of Landlord's contractor and Landlord until completion of Landlord's Work and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right to exclude Tenant and any Tenant Party from the Premises and the Project until Substantial Completion of Landlord's Work.

(c) **No Acceptance of Premises.** The fact that Tenant may, with Landlord's consent, enter into the Project prior to the date Landlord's Work is Substantially Complete for the purpose of performing Tenant's Work shall not be deemed an acceptance by Tenant of possession of the Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party arising from such access to the Project by Tenant or any Tenant Party prior to the Substantial Completion of the Landlord's Work.

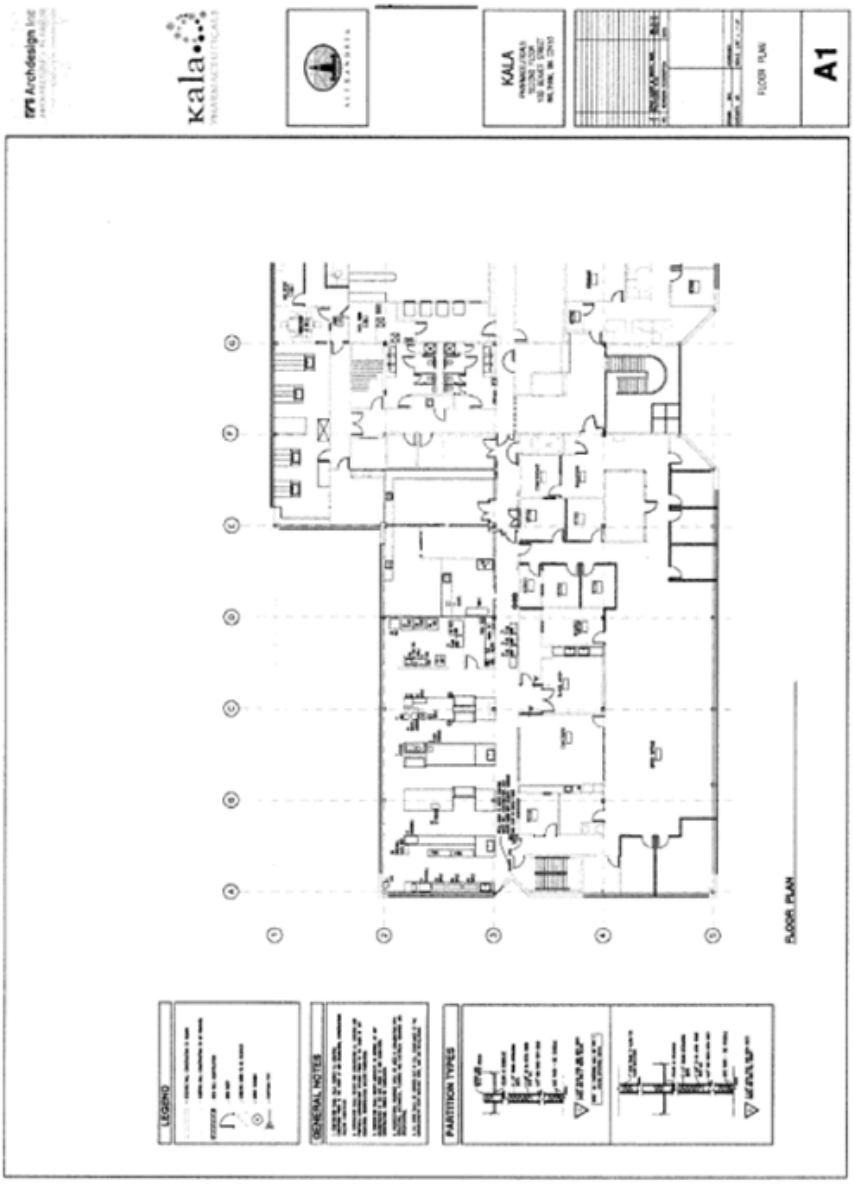
7. **Miscellaneous.**

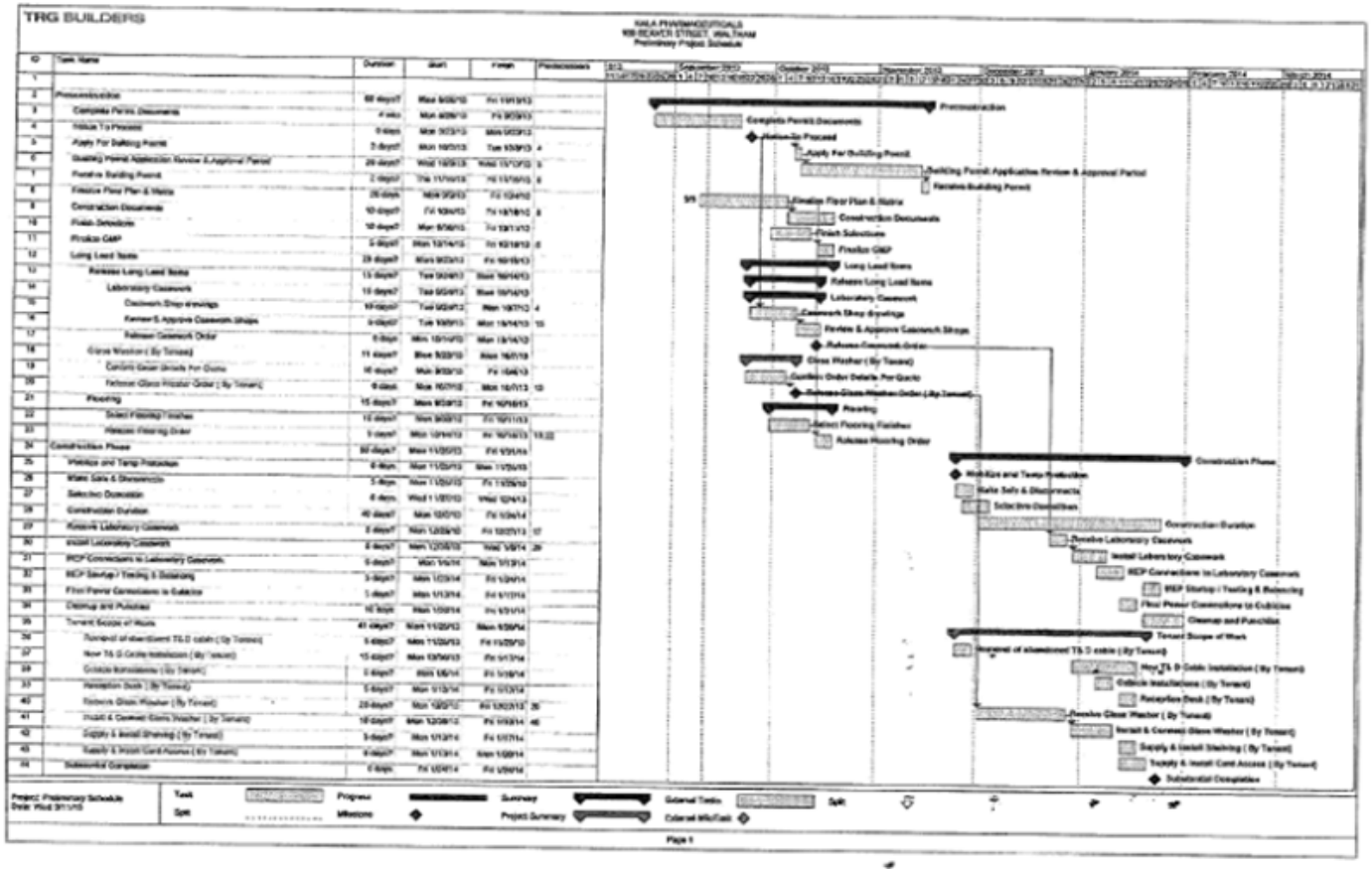
(a) **Consents.** Whenever consent or approval of either party is required under this Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

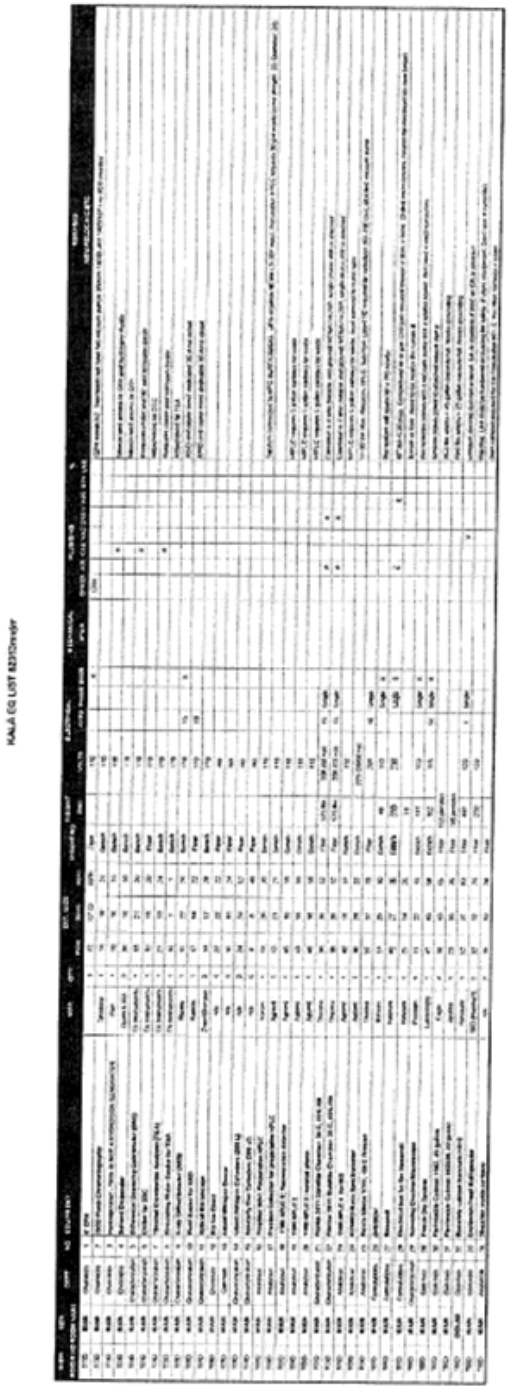
(b) **Modification.** No modification, waiver or amendment of this Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

Schedule 1

Space Plan




TRG BUILDERS
Preliminary Project Schedule
Project: Preliminary Schedule
Page 1



TRG BUILDERS

Kala Pharmaceuticals
100 Beaver Stret
Waltham, MA
Budget Estimate

Revised 9/12/13

Division/Description	Qty	UM	Unit Cost	Total	Division Total
Project Requirements					
Final cleaning	1	ls			
General labor / daily cleaning	17	dys			
Debris dumpsters	4	ea			
Misc. tools and supplies.	2	mo			
Reproduction of contract documents.	1	ls			
General safety/protection/barricades, incl maintenance.	2	mo			
Safety inspections	6	ea			
Dust control (materials)	1	ls			
Draining & shutdown fees (sprinkler, etc.)				**By Others**	
General police details/fire watch				W/ subs	
Demolition					
Remove walls per plans	717	lf			
Remove partial suspended ceilings as required	4201	sf			

Remove carpet as required	1207	sf			
Remove VCT	5230	sf			
Remove doors & frames	26	ea			
Remove GWB ceilings	323	sf			
Remove abandoned lab casework & hoods	1	ls			
Haz. Waste abatement & removal				**By Others**	
Common area temp protection, isolation, exhaust	1	alw			
General labor & daily cleanup	3	dys			
Dumpsters	3	ea			
Concrete & Masonry					**No work**
Steel & misc. iron					**No work**
Rough and Finish Carpentry					
Misc. carpentry labor				By super	
Installation of doors & hardware				By super	
New Cafe / meeting millwork uppers & lowers	16	lf			
Allowance to patch wood window sills per new layout	84	lf			
Lab supply & office supply shelving / bench				**By Others**	
General labor & daily cleanup	3	dys			
Dumpsters	1	ea			
Thermal and Moisture Protection					
Misc caulking				In painting	

Division/Description	Qty	UM	Unit Cost	Total	Division Total
Doors, Frames and Hardware					
Reuse existing office doors & frames as possible	5	ea		inc	
New wood doors, frames & hardware	12	ea			
New HM sidelite frames	4	ea			
Reuse existing sidelite frames	6	ea		inc	
Specially / card access hardware				**By others**	
Glass and Glazing					
Remove & reinstall existing glass at sidelites	6	ea			
New glass door sidelite glazing	4	ea			
New 4’ high borrowed lite glass at Café / Meeting	14	lf			
New interior butt glazed glass wall at Café / meeting	14	lf			
New interior butt glazed glass wall at Executive Office	10	lf			
Vision kits at doors	3	ea			
Conf. room & main entry glass				Existing	
General labor & daily cleanup	1	dys			
Gypsum Drywall					
Install door frames	17	ea			
Install sidelite frames	10	ea			
New 10’ GWB partitions	443	lf			
New full ht GWB partitions	90	lf			
Inwall blocking	1	a/w			
Allowance for misc. patch at demo areas	1	a/w			
Extend existing to clock as required for demising	325	sf			
GWB. ceilings				**EXCLUDED**	
General labor & daily cleanup	3	dys			
Dumpsters	1	ea			
Acoustic Ceilings					
New Mylar ceiling tiles in existing grid	3,385	sf	7.75		
New suspended ceilings as required to match @ office areas	5,292	sf			
New suspended ceiling at Cafeteria.	550	sf	4.30		
General labor & daily cleanup	3	dys	400		
Dumpsters	0.50	ea			

Division/Description	Qty	UM	Unit Cost	Total	Division Total
Flooring Systems					
Sheet vinyl in BL-2 lab	30	sy	95		
New VCT Cafeteria / Meeting	550	sf	2.75		
New VCT at main labs & lab corridor	3,538	sf	2.75		
New VCT at Lab supply	187	sf	2.75		
Vinyl baseboard	1,388	lf	2.25		
Floor prep	4,200	sf	1.25		
Carpet for Exec. Area 3 offices	67	sy	35		
Caroet for offices adjacent to café	34	sy	35		
Carpet at open office area				**To remain**	
Carpet at conf. room				**To remain**	
Carpet at reception				**To remain**	
Epoxy flooring in glass wash				**To remain**	
New carpet at new offices	7	ea		inc	
New carpet at small conf. rooms	2	ea		inc	
Subcontractor quote	1	qt			
General labor & daily cleanup	2	dys			
Dumpsters	0.50	ea			
Painting					
Epoxy paint new & existing walls at lab & lab support rooms	4,474	sf	1.10		
Latex prime & paint at new & existing office & office support areas	7,920	sf	0.75		
Paint new & existing door & sidelite frames	16	ea	1.75		
Existing paint to remain at existing to remain areas				inc	
General labor & daily cleanup	2	dys			
Specialties & furnishings					
Supply & install Dishwasher	1	alw	650		
Supply & install Ref.	1	alw	1,400		
Office furniture & cubicles				**By others**	
Supply & install Lancer 1400 LXPGW (Labrepco qt)	1	ea		**By others**	
Sales tax for Lancer equipment	1	ls		**By others**	
Remove & dispose of existing wash equipment	1	qt			
Laboratory equipment (BSC's, etc.)				**By others**	
Reception desk				**By others**	
Laboratory Casework					
Supply & install new fixed lab casework island benches per plans	4	ea		inc	
New island bench reagent shelving per plans	3	pcs		inc	
New wall bench with epoxy sink at Analytical	29	lf		inc	
New wall bench at Ancillary lab	13	lf		inc	
New island bench sink bases with epoxy sinks	2	ea		inc	
Island benches to have 6' wide epoxy tops	1	ls		inc	
Subcontractor quote (LFI&S)	1	qt			
6' Chemical Fume hoods	5	ea		**To remain**	
New Chemical Fume Hoods				**EXCLUDED**	
BL2 lab bench				**To remain**	
Glasswash Room lab bench				**To remain**	
General labor & daily cleanup	2	dys			

Division Description	Qty	UM	Unit Cost	Total	Division Total
Fire Protection					
Relocate heads per code at areas of renovation	5,292	sf			
Fire protection engineering	1	ls			
General labor & daily cleanup	2	dys			
Draining & shut down fees					
Plumbing					
Demo & disconnect of existing adandoned services	1	is		inc	
New Cafteria sink, piping, drain & DW connection	1	ea		inc	
New vacuum piping & drops (connect to existing mains)	10	ea		inc	
Now C, A piping & drops (connect to existing mains)	10	ea		inc	
New gaseous N2 piping to existing CFH's	5	ea		inc	
Design & engineering & permits	1	ls		inc	
Change out sinks at existing lab (water, drain, RODI & EW)	3	ea		inc	

Disconnect existing GW & connect to new Lancer unit	1	ea	inc
Subcontractor budget (NSMC)	1	bgt	
Existing sinks at BL2 & GW rooms	3	ea	**To remain**
Utilities & piping to furne hoods	5	ea	**To remain**
Vacuum pump, Air compressor & RODI system			**To remain**
Existing ES / EW stations & piping			**To remain**
N2 / Specialty gas manfolds			**EXCLUDED**
Natural gas piping			**EXCLUDED**
New RODI piping & drops			**None shown**
Liquid N2 & piping			**By others**
Process chiller & chiller equipment piping			**By others**

HVAC

Demo and Make safe hot water piping to existing reheat coils	1	ls	inc
Demo and Make safe supply and exhaust valves in existing holding room	1	ls	inc
Provide four new VAV boxes with re heats (cafe, conference, and offices	4	ea	inc
New controls and wiring	1	ls	inc
Disconnect and make safe existing hood	1	ls	inc
Programing	1	ls	inc
Graphics upgrade to existing controls	1	ls	inc
Hot water piping to new coils	5	ea	inc
Pipe and duct insulation	1	ls	inc
Start up, testing, balancing	1	ls	inc
Design & engineering & permits	1	ls	inc
Subcontractor budget (ESI)	1	bgt	
General labor & daily cleanup	2	dys	

Electrical

Fixtures and switching	1	ls	inc
Recepticals and wire mold	1	ls	inc
Re-use fixtures where possible	1	ls	inc
New parabolic lights in new private offices	1	ls	inc
Power wiring to new HVAC equipment	1	ls	inc
Relocate existing panels in Future cafe	1	ls	inc
Distribution and feeds	1	ls	inc
Fire alarm	1	ls	inc
misc power for equipment	1	ls	inc
480 v 3 ph power for new GW	1	ea	inc
Design & engineering & permits	1	ls	inc
Ring & String Tenant supplied T/D wiring	1	ls	inc

Division/Description	Qty	UM	Unit Cost	Total	Division Total
Subcontractor budget (IES)	1	bgt			
Ring & String for Tenant supplied T/D wiring	1	ls		inc	
T/D wiring				**By Others**	
Existing Laboratory lighting				**To remain**	
Existing glass wash room lighting & power				**To remain**	
Engineering					
Architectural services (Archdesign)					
MEP Engineering				**WJ subs**	
Structural engineering				**EXCLUDED**	
Pre-construction & planner	1	ls			
Permits					
Fire department fees	1	ls			
Building Permit fees	22	%			
I&I fees				**EXCLUDED**	
Supervision & Management					
Project Manager (2/5 time)	8	wks			
Working Superintendent	8	wks			
Admin & accounting	6	dys			
General Conditions					
Field Office					
Field office supplies	2	mo			
Courier/overnight/postage	2	mo			
Drinking water	2	mo			
Sanitary facilities				Use existing	
Cell Phone & wireless usage	200	mo			
Insurance					

General Liability Insurance	0.8 %	
Bond		**Excluded**

Clarifications:

1) Estimate is based on normal working hours (7:00-3:30 M-F)
2) Estimate is based on a single phase of construction
3) Estimate is based on drawings: Space Plan Option "D" 8/19/13 & KALA equipment list 82313 by John R. Refuse AIA
4) Estimate EXCLUDES any new CFH's

EXHIBIT D TO LEASE

ACKNOWLEDGMENT OF COMMENCEMENT DATE

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made this day of , , between **ARE-MA REGION NO. 9, LLC**, a Delaware limited liability company ("**Landlord**"), and **KALA PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**"), and is attached to and made a part of the Lease dated , (the "**Lease**"), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date is , , and the termination date of the Base Term of the Lease shall be midnight on , . In case of a conflict between the terms of the Lease and the terms of this Acknowledgment of Commencement Date, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:

KALA PHARMACEUTICALS, INC.,
a Delaware corporation

By: _____
Its: _____

LANDLORD:

ARE-MA REGION NO. 9, LLC,
a Delaware limited liability company

By: ARE-MA REGION NO. 9MM, LLC, a Delaware limited liability company, manager

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P., a Delaware limited partnership, its member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: _____
Its: _____

EXHIBIT E TO LEASE

Rules and Regulations

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.

2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.

3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.

4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.

5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.

6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.

7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.

8. Tenant shall maintain the Premises free from rodents, insects and other pests.

9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.

10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.

11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.

12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

14. No auction, public or private, will be permitted on the Premises or the Project.

15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.

16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.

EXHIBIT F TO LEASE

TENANT'S PERSONAL PROPERTY

None.

EXHIBIT G TO LEASE

HAZARDOUS MATERIALS LIST

Kala Pharmaceuticals, Inc. FLAMMABLE CHEMICALS LISTING Sep-2013

Kala Pharmaceuticals Inc.
Third Floor, 135 BEAVER STREET
WALTHAM, MA

Sep-13

Requested Permit Amounts:

Class I	100 gallons
Class II	20 gallons
Class III	20 gallons
Flammable gas	300 cu ft
Flammable solids	<10 lbs

FLAMMABLE CHEMICALS LISTING

FLAMMABLE LIQUIDS-Class 1A, 1B, 1C

	Substance	Flammable Class	Physical state	Volume (L)	Volume (Gal)
10684	Diethyl ether	1A	liquid	4	**1.03**
10265	Diethyl ether	1A	liquid	20	**5.14**
NA	Waste Class 1A	1A	liquid	77.6	**20.00**
total volume Class 1A:				**101.8**	**26.17**
10440	1,4-Dioxane	1B	liquid	1	**0.26**
10705	2-Propanol	1B	liquid	4	**1.03**
10723	2-Propanol	1B	liquid	4	**1.03**
10724	2-Propanol	1B	liquid	4	**1.03**
10746	2-Propanol	1B	liquid	4	**1.03**
10747	2-Propanol	1B	liquid	4	**1.03**
10713	Acetone	1B	liquid	4	**1.03**
10719	Acetone	1B	liquid	4	**1.03**
10943	Acetone	1B	liquid	1	**0.26**
10753	Acetonitrile	1B	liquid	4	**1.03**
10729	Acetonitrile	1B	liquid	4	**1.03**
10725	Acetonitrile	1B	liquid	4	**1.03**
10730	Acetonitrile	1B	liquid	4	**1.03**
10702	Acetonitrile	1B	liquid	4	**1.03**
10697	Acetonitrile	1B	liquid	4	**1.03**
10386	Acetonitrile	1B	liquid	1	**0.26**
10272	Benzene	1B	liquid	1	**0.26**
10392	Cyclohexane	1B	liquid	1	**0.26**
10289	Ethanol	1B	liquid	4	**1.03**
10748	Ethyl acetate	1B	liquid	4	**1.03**
10749	Ethyl acetate	1B	liquid	4	**1.03**
10755	Ethyl acetate	1B	liquid	4	**1.03**
10756	Ethyl acetate	1B	liquid	4	**1.03**
10718	Ethyl acetate	1B	liquid	4	**1.03**
10715	Ethyl acetate	1B	liquid	4	**1.03**
10958	Hexanes	1B	liquid	4	**1.03**
10393	Isopropyl ether	1B	liquid	1	**0.26**
10738	Methanol	1B	liquid	4	**1.03**
10739	Methanol	1B	liquid	4	**1.03**
10734	Methanol	1B	liquid	4	**1.03**
10740	Methanol	1B	liquid	4	**1.03**

10689	Methanol	1B	liquid	4	**1.03**
10391	Methanol	1B	liquid	1	**0.26**
10434	Methyl ethyl ketone	1B	liquid	4	**1.03**
10279	Methyl ethyl ketone	1B	liquid	4	**1.03**
10546	n-Propanol	1B	liquid	1	**0.26**
10288	Propyl acetate	1B	liquid	1	**0.26**
10292	Pyridine	1B	liquid	1	**0.26**
10517	t-Butanol	1B	liquid	1	**0.26**
10647	Tetrahydrofuran	1B	liquid	1	**0.26**
10670	Tetrahydrofuran	1B	liquid	1	**026**
10290	Toluene	1B	liquid	1	**0.26**
10375	Methyl tert-butyl ether	1B	liquid	1	**0.26**
10962	1,2-Dichloroethane	1B	liquid	1	**0.26**
10962	1,2-Dichloroethane	1B	liquid	1	**0.28**
NA	Waste, Class 1B	1B	liquid	155.6	**40.00**
total volume Class 1B:				**284.6**	**73.16**
10295	Nitromethane	1C	liquid	1	**0.26**
10269	1-Butanol	1C	liquid	1	**0.26**
total volume Class 1C:				**2**	**0.51**
total volume Class 1:				**388.4**	**99.85**

NOTE: Total volume of Class I is higher than the June 2013 list by 9 gallons due to increase in Waste from 51 to 60 gallons.

COMBUSTIBLE LIQUIDS-Class II

	Substance	Flammable Class	Physical state	Volume (L)	Volume (Gal)
10278	1,2-Dimethoxyethane	2	liquid	1	**0.26**
10268	N,N-Dimethylformamide	2	liquid	1	**0.26**

10731	N,N-Dimethylformamide	2	liquid	1	**0.26**
10277	1-Octanethiol	2	liquid	1	**0.26**
10291	Hexan-1-ol	2	liquid	1	**0.26**
10274	2-Methoxyethyl ether	2	liquid	1	**0.26**
total volume Class 2:				**6**	**1.54**

COMBUSTIBLE LIQUIDS-Class III

	Substance	Flammable Class	Physical state	Volume (L)	Volume (Gal)
10520	N,N-Dimethylacetamide	3A	liquid	1	**0.26**
10264	Dimethyl sulfoxide	3	liquid	4	**1.03**
10273	Etahanolamine	3A	liquid	1	**0.26**
10297	Ethylene glycol	3B	liquid	1	**0.26**
10276	Ethylene glycol	3B	liquid	1	**0.26**
10632	N-Methyl-2-pyrrolidone	3A	liquid	1	**0.26**
10293	Propylene glycol	3B	liquid	1	**0.26**
total volume Class 3:				**10**	**2.57**

FLAMMABLE GASES

	Substance	Vol (cu. ft)
NA	HYDROGEN	100
10390	BUTANE CYL	30
10389	PROPANE-1-1	17
total volume		147

FIRST AMENDMENT TO LEASE

This First Amendment (the "**First Amendment**") to Lease is made as of June 30, 2016, by and between **ARE-MA REGION NO. 9, LLC**, a Delaware limited liability company ("**Landlord**"), and **KALA PHARMACEUTICALS, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord and Tenant are now parties to that certain Lease Agreement dated as of September 30, 2013 (the "**Lease**"), wherein Landlord leases to Tenant certain premises containing approximately 11,747 rentable square feet (the "**Premises**") located at 100 Beaver Street, Waltham, Massachusetts, as more particularly described therein. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. The term of the Lease is scheduled to expire on January 31, 2017.

C. Landlord and Tenant desire to amend the Lease to, among other things, extend the term of the Lease through January 31, 2019 (the "**First Amendment Expiration Date**").

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Term**. The expiration date of the term of the Lease is hereby extended through the First Amendment Expiration Date. Except as otherwise expressly provided in this First Amendment, Tenant's occupancy of the Premises through the First Amendment Expiration Date shall be on an "as-is" basis and Landlord shall have no obligation to provide any tenant improvement allowance or to make any alterations to the Premises.

2. **Base Rent**. Tenant shall continue to pay Base Rent as provided in the Lease through January 31, 2017. For the period commencing on February 1, 2017, through January 31, 2018, Tenant shall pay Base Rent for the Premises equal to $34.00 NNN per rentable square foot of the Premises per year. For the period commencing on February 1, 2018, through January 31, 2019, Tenant shall pay Base Rent for the Premises equal to $35.00 NNN per rentable square foot of the Premises per year.

3. **Allowances**. Landlord shall make available to Tenant (i) a tenant improvement allowance of up to $10,000 (the "**Base Allowance**"), and (ii) an additional tenant improvement allowance of up to $20,000 (the "**Additional Allowance**"), all for the design and construction of improvements to the Premises desired by Tenant and performed by Landlord, which improvements shall be of a fixed and permanent nature and be acceptable to Landlord in Landlord's sole and absolute discretion (the "**Premises Improvements**"). Tenant shall deliver to Landlord, for Landlord's review and approval plans and specifications detailing Tenant's requirements for the Premises Improvements Landlord shall cause the Premises Improvements approved by Landlord to be completed in a good and workmanlike manner in accordance with Legal Requirements. Notwithstanding the foregoing, if the cost of the Premises Improvements exceeds the Base Allowance and the Additional Allowance elected to be used by Tenant, Tenant shall deposit with Landlord, as a condition precedent to Landlord's obligation to perform the Premises Improvements, 100% of the then current costs in excess of the remaining Base Allowance and Additional Allowance elected to be used by Tenant ("**Excess Costs**"). If Tenant fails to deposit any Excess Costs with Landlord, Landlord shall have all of the rights and remedies set forth in this Lease for nonpayment of Rent. The Base Allowance and the Additional Allowance shall only be available

for use by Tenant for the Premises Improvements until June 30, 2017. Any portion of the Base Allowance or the Additional Allowance which has not been properly requested by Tenant from Landlord on or before June 30. 2017, shall be forfeited and shall not be available for use by Tenant.

Commencing on the first day of the month following the date that any portion of the Additional Allowance has been disbursed by Landlord for the Premises Improvements and continuing thereafter on the first day of each month through the First Amendment Expiration Date, Tenant shall pay the amount necessary to fully amortize the portion of the Additional Allowance actually funded by Landlord, if any, over a period of 5 years in equal monthly payments with interest at a rate of 8% per annum.

Tenant acknowledges that Landlord shall require access to the Premises in order to complete the Premises Improvements desired by Tenant pursuant to this Section 3. Landlord and its contractors and agents shall have the right to enter the Premises to complete such Premises Improvements. Tenant acknowledges that Landlord's completion of the Premises Improvements may adversely affect Tenant's use and occupancy of the Premises. Tenant waives all claims against Landlord for rent abatement in connection with the Premises Improvements.

4. **Right to Expand**. Section 39 of the Lease is hereby deleted in its entirety and is null and void and of no further force or effect and Tenant has no right to expand the Premises.

5. **Right to Extend**. Section 40 of the Lease is hereby deleted in its entirety and is null and void and of no further force or effect and Tenant has no right to extend the Term of the Lease beyond the First Amendment Expiration Date.

6. **OFAC**. Tenant is currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

7. **Miscellaneous**.

a. This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.

b. This First Amendment is binding upon and shall inure to the benefit of the parties hereto and their respective agents and assigns.

c. This First Amendment may be executed in any number of counterparts, each of which shall be deemed an original but all of which when taken together shall constitute one and the same instrument. The signature page of any counterpart may be detached therefrom without impairing the legal effect of the signature(s) thereon provided such signature page is attached to any other counterpart identical thereto except having additional signature pages executed by other parties to this First Amendment attached thereto.

d. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this First Amendment and that no Broker brought about this transaction. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this First Amendment.

e. Except as amended and/or modified by this First Amendment. the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the Lease, the provisions of this First Amendment shall prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

[Signatures are on the next page]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

TENANT:

KALA PHARMACEUTICALS, INC.,
a Delaware corporation

By: /s/ Mary Reumuth
Its: VP Finance and Corporate Controller

LANDLORD:

ARE-MA REGION NO. 9, LLC,
a Delaware limited liability company

By: Alexandria Real Estate Equities, L.P.,
a Delaware limited partnership
its member

By: ARE-ORS Corp.,
a Maryland corporation
its general partner

By: /s/ Eric S. Johnson
Its: Senior Vice President
RE Legal Affairs

KALA PHARMACEUTICALS, INC.

LOAN AND SECURITY AGREEMENT

This LOAN AND SECURITY AGREEMENT (this "Agreement") is entered into as of November 20, 2014, by and among Square 1 Bank ("Square 1"), in its capacity as administrative and collateral agent (together with its successors and assigns in such capacity, "Agent") for the lenders hereto as of the date hereof and other financial institutions who hereafter become parties to this Agreement as lenders (each individually a "Lender" and, collectively, the "Lenders"), the Lenders set forth on Schedule 1 hereto and Kala Pharmaceuticals, Inc. ("Borrower").

RECITALS

Borrower wishes to obtain credit from time to time from the Lenders, and the Lenders desire to extend credit to Borrower. This Agreement sets forth the terms on which the Lenders will advance credit to Borrower and Borrower will repay the amounts owing to the Lenders.

AGREEMENT

The parties agree as follows:

1. DEFINITIONS AND CONSTRUCTION.

1.1 Definitions. As used in this Agreement, all capitalized terms shall have the definitions set forth on Exhibit A. Any term used in the Code and not defined herein shall have the meaning given to the term in the Code.

1.2 Accounting Terms. Any accounting term not specifically defined on Exhibit A shall be construed in accordance with GAAP, and all calculations shall be made in accordance with GAAP (except for the calculation of warrant liabilities and stock compensation expenses on Borrower's unaudited financial statements only, which calculations shall be made in accordance with management accounting consistent with past practices). The term "financial statements" shall include the accompanying notes and schedules.

2. LOAN AND TERMS OF PAYMENT.

2.1 Credit Extensions.

(a) Promise to Pay. Borrower promises to pay to the Lenders, in lawful money of the United States of America, the aggregate unpaid principal amount of all Credit Extensions made by the Lenders to Borrower, together with interest on the unpaid principal amount of such Credit Extensions at rates in accordance with the terms hereof.

(b) Term Loan.

(i) Subject to and upon the terms and conditions of this Agreement, the Lenders agree to make, severally and not jointly, according to each Lender's Term Loan Commitment Amount, one or more term loans to Borrower in an aggregate principal amount not to exceed $10,000,000 (each a "Term Loan" and, collectively, the "Term Loans"). Each Term Loan shall be in a minimum amount of $250,000. Borrower may request Term Loans at any time from the date hereof through the Availability End Date. The proceeds

of the Term Loans shall be used for general working capital purposes, and for capital equipment purchases, to pay Lender Expenses and to pay the fees under this Agreement.

(ii) Interest shall accrue from the date of each Term Loan at the rate specified in Section 2.2(a) and, through the Interest-Only End Date, shall be payable monthly in arrears beginning on the first day of the month next following such Term Loan, and continuing on the same day of each month thereafter. Any Term Loans that are outstanding on the Interest-Only End Date shall be payable in 30 equal monthly installments of principal, plus all accrued interest, beginning on the first day of the month immediately following the Interest-Only End Date and continuing on the same day of each month thereafter through the Term Loan Maturity Date, at which time all amounts due in connection with the Term Loans and any other amounts due under this Agreement shall be immediately due and payable. Term Loans, once repaid, may not be reborrowed. Borrower may prepay any Term Loan, subject to the payment of the Prepayment Fee.

(iii) When Borrower desires to obtain a Term Loan, Borrower shall notify Agent (which notice shall be irrevocable) by facsimile transmission to be received no later than 3:30 p.m. Eastern time at least five Business Days prior to the date on which the Term Loan is to be made. Such notice shall be substantially in the form of Exhibit C and signed by an Authorized Officer. Promptly upon receiving such notice, Agent shall notify each Lender of the contents of such notice and each Lender's Pro Rata Share of such Term Loan.

2.2 Interest Rates, Payments, and Calculations.

(a) Interest Rates. Except as set forth in Section 2.2(b), the Term Loans shall bear interest, on the outstanding daily balance thereof, at a variable annual rate equal to the greater of (i) 3.00% above the Prime Rate then in effect, or (ii) 6.25%.

(b) Late Fee; Default Rate. If any payment is not made within 15 days after the date such payment is due, Borrower shall pay Agent (for the benefit of the Lenders) a late fee equal to the lesser of (i) 5% of the amount of such unpaid amount or (ii) the maximum amount permitted to be charged under applicable law. All Obligations shall bear interest, from and after the occurrence and during the continuance of an Event of Default, at a rate equal to five percentage points above the interest rate applicable immediately prior to the occurrence of the Event of Default.

(c) **Payments**. Agent shall charge all interest, all Lender Expenses, and all Periodic Payments against any of Borrower's deposit accounts. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder.

(d) **Computation**. In the event the Prime Rate is changed from time to time hereafter, the applicable rate of interest hereunder shall be increased or decreased, effective as of the day the Prime Rate is changed, by an amount equal to such change in the Prime Rate. All interest chargeable under the Loan Documents shall be computed on the basis of a 360-day year for the actual number of days elapsed.

2.3 **Crediting Payments**. Prior to the occurrence of an Event of Default, Agent shall credit a wire transfer of funds, check or other item of payment to such deposit account or Obligation as Borrower specifies. After the occurrence and during the continuance of an Event of Default, Agent shall have the right, in its sole discretion, to immediately apply any wire transfer of funds, check, or other item of payment Agent may receive to conditionally reduce Obligations, but such applications of funds shall not be considered a payment on account unless such payment is of immediately available federal funds or unless and until such check or other item of payment is honored when presented for payment. Notwithstanding anything to the contrary contained herein, any wire transfer or payment received by Agent after 5:30 p.m. Eastern time shall be deemed to have been received by Agent as of the opening of business on the immediately following Business Day. Whenever any payment to Agent under the Loan Documents would otherwise be due (except by reason of acceleration) on a date that is not a Business Day, such payment shall instead be due on the next Business Day, and additional fees or interest, as the case may be, shall accrue and be payable for the period of such extension.

2.4 **Fees**. Borrower shall pay the following:

(a) **Facility Fee**. On or before the Closing Date, a fee equal to $50,000 to be paid to Agent (for the benefit of the Lenders), which shall be nonrefundable;

(b) **Lender Expenses**. On the Closing Date, all Lender Expenses incurred through the Closing Date, and, after the Closing Date, all Lender Expenses, as and when they become due.

(c) **Prepayment Fee**. In connection with any prepayment of any principal amount of the Term Loans prior to the Term Loan Maturity Date, including following acceleration under Section 9.1, Borrower shall pay to Agent (for the benefit of the Lenders), on the date of such prepayment, a prepayment fee (the "Prepayment Fee") in an amount equal to the principal amount so prepaid multiplied by a percentage determined in accordance with the following schedule:

Period	Applicable Prepayment Percentage
From the Closing Date to (but not including) the first anniversary of the Closing Date	0.90%
From the first anniversary of the Closing Date to (but not including) the second anniversary of the Closing Date	0.60%
From the second anniversary of the Closing Date and thereafter until the Term Loan Maturity Date	0.30%

Borrower acknowledges that the foregoing Prepayment Fee represents a reasonable and fair estimate for the loss that the Lenders may sustain from the prepayment of the Term Loans prior to the Term Loan Maturity Date and further acknowledges that, except as specifically provided herein, Borrower has no right to optionally prepay the Term Loans in whole or in part without paying the foregoing Prepayment Fee. For the avoidance of doubt, no Prepayment Fee shall be payable in connection with any payment of regularly scheduled principal installments of the Term Loans.

2.5 **Term**. This Agreement shall become effective on the Closing Date and, subject to Section 12.7, shall continue in full force and effect for so long as any Obligations remain outstanding or any Lender has any obligation to make Credit Extensions under this Agreement. Notwithstanding the foregoing, the Lenders shall have the right to terminate their obligation to make Credit Extensions under this Agreement immediately and without notice upon the occurrence and during the continuance of an Event of Default.

3. **CONDITIONS OF LOANS**.

3.1 **Conditions Precedent to Closing**. The agreement of Agent and the Lenders to enter into this Agreement on the Closing Date is subject to the condition precedent that Agent and the Lenders shall have received, in form and substance satisfactory to Agent and the Lenders, each of the following items and shall have completed each of the following requirements:

(a) this Agreement;

(b) an officer's certificate of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement;

(c) a financing statement (Form UCC-1);

(d) a Loan Advance/Paydown Request Form in a minimum amount of $5,000,000;

(e) payment of the fees and Lender Expenses then due specified in Section 2.4, which may be debited from any of Borrower's accounts with Square 1;

(f) current SOS Reports indicating that, except for Permitted Liens, there are no other security interests or Liens of record in the Collateral;

(g) current financial statements, including audited statements for Borrower's most recently ended fiscal year, together with an unqualified opinion (or an opinion qualified only for going concern solely due to Borrower's projected need for additional funding to continue operations), company

prepared consolidated, if applicable, balance sheets, income statements and statements of cash flows for the most recently ended month in accordance with Section 6.2, and such other updated financial information as the Lenders may reasonably request;

(h) current Compliance Certificate in accordance with Section 6.2;

(i) warrants duly executed by Borrower and issued to each Lender;

(j) a Borrower Information Certificate;

(k) a deposit account control agreement with respect to Borrower's account numbers and at Square 1;

(l) [Reserved];

(m) a payoff letter from Lighthouse Capital Partners VI, L.P.;

(n) a copy of Borrower's policies or certificates of insurance including any endorsements showing Agent as loss payee (for the benefit of Lenders) and showing Agent and each Lender as an additional insured;

(o) such other documents or certificates, and completion of such other matters, as Agent and/or any Lender may reasonably request; and

(p) Borrower shall have opened and funded deposit accounts held with Square 1.

3.2 Conditions Precedent to all Credit Extensions. The obligation of the Lenders to make each Credit Extension, including the initial Credit Extension, is contingent upon Borrower's compliance with Section 3.1 above, and is further subject to the following conditions (except that the initial Credit Extension is not subject to the conditions in clause (b)):

(a) timely receipt by Agent of the Loan Advance/Paydown Request Form as provided in Section 2.1;

(b) Borrower shall have transferred substantially all of its Cash assets into operating accounts held with Square 1 and shall otherwise be in compliance with Section 6.6 hereof;

(c) in the Lenders' sole reasonable discretion, there has not been a Material Adverse Effect; and

(d) the representations and warranties contained in Article 5 shall be true and correct in all material respects on and as of the date of such Loan Advance/Paydown Request Form and on the effective date of each Credit Extension as though made at and as of each such date, and no Event of Default shall have occurred and be continuing, or would exist after giving effect to such Credit Extension (provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date). The making of each Credit Extension shall be deemed to be a representation and warranty by Borrower on the date of such Credit Extension as to the accuracy of the facts referred to in this Section 3.2.

4. CREATION OF SECURITY INTEREST.

4.1 Grant of Security Interest. Borrower grants and pledges to Agent (for the benefit of the Lenders) a continuing security interest in the Collateral to secure prompt repayment of any and all Obligations and to secure prompt performance by Borrower of each of its covenants and duties under the Loan Documents (other than warrants). Except for Permitted Liens or as disclosed in the Schedule, such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in later-acquired Collateral. Borrower also hereby agrees not to sell, transfer, assign, mortgage, pledge, lease, grant a security interest in, or encumber any of its Intellectual Property, except for Permitted Transfers and Permitted Liens. Notwithstanding any termination

of this Agreement or of any filings undertaken related to Agent's or the Lenders' rights under the Code, Agent's Lien on the Collateral shall remain in effect for so long as any Obligations are outstanding.

4.2 Perfection of Security Interest. Borrower authorizes Agent to file at any time financing statements, continuation statements, and amendments thereto that (a) either specifically describe the Collateral or describe the Collateral as all assets of Borrower of the kind pledged hereunder, and (b) contain any other information required by the Code for the sufficiency of filing office acceptance of any financing statement, continuation statement, or amendment, including whether Borrower is an organization, the type of organization and any organizational identification number issued to Borrower, if applicable. Borrower shall have possession of the Collateral, except where expressly otherwise provided in this Agreement or where Agent chooses to perfect its security interest by possession in addition to the filing of a financing statement. Where Collateral is in possession of a third-party bailee, Borrower shall take such steps as Agent reasonably requests for Agent to (i) to the extent required under Section 7.10 below, obtain an acknowledgment, in form and substance reasonably satisfactory to Agent and the Required Lenders, of the bailee that the bailee holds such Collateral for the benefit of Agent, and (ii) to the extent required under Section 6.6 below, obtain "control" of any Collateral consisting of investment property, deposit accounts, letter-of-credit rights or electronic chattel paper (as such items and the term "control" are defined in Revised Article 9 of the Code) by causing the securities intermediary or depositary institution or issuing bank to execute a control agreement in form and substance reasonably satisfactory to Agent and the Required Lenders. Borrower will not create any chattel paper without placing a legend on the chattel paper acceptable to Agent indicating that Agent (for the benefit of the Lenders) has a security interest in the chattel paper. Borrower from time to time, pursuant to additional agreements by Borrower, may deposit with a Lender specific cash collateral to secure specific Obligations; Borrower authorizes the Lenders to hold such specific balances in pledge and to decline to honor any drafts thereon or any request by Borrower or any other Person to pay or otherwise transfer any part of such balances for so long as the specific Obligations are outstanding. Borrower shall take such other actions as Agent reasonably requests to perfect Agent's security interests granted under this Agreement.

5. REPRESENTATIONS AND WARRANTIES.

Borrower represents and warrants to Agent and each Lender as follows:

5.1 Due Organization and Qualification. Borrower and each Subsidiary is duly existing under the laws of the state in which it is organized and qualified and licensed to do business in any state in which the conduct of its business or its ownership of property requires that it be so qualified, except where the failure to do so would not reasonably be expected to cause a Material Adverse Effect.

5.2 Due Authorization; No Conflict. The execution, delivery, and performance of the Loan Documents are within Borrower's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in Borrower's Certificate of Incorporation or Bylaws, nor will they constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any

agreement by which it is bound, except to the extent such default would not reasonably be expected to cause a Material Adverse Effect.

5.3 Collateral. Except as set forth on Schedule 5.3, Borrower has rights in or the power to transfer the Collateral, and its title to the Collateral is free and clear of Liens, adverse claims, and restrictions on transfer or pledge except for Permitted Liens and licenses and agreements containing customary anti-assignment provisions so long as such provisions are, or would be, rendered unenforceable or ineffective under applicable law (including, without limitation, Sections 9-406, 9-407 and 9-408 of the Code). Other than movable items of personal property such as laptop computers, all Collateral having an aggregate book value in excess of $100,000 is located solely in the Collateral State, at the locations set forth on Schedule 7.10 and such other locations permitted under Section 7.10. All Inventory is in all material respects of good and merchantable quality, free from all material defects, except for Inventory for which adequate reserves have been made. Except as set forth in the Schedule or as permitted under Section 6.6, none of Borrower's Cash is maintained or invested with a Person other than Square 1 or Square 1's Affiliates.

5.4 Intellectual Property. Except as set forth on Schedule 5.4, Borrower is the sole owner of the Intellectual Property created or purchased by Borrower. Except as set forth on Schedule 5.4, to the best of Borrower's knowledge, each of the Copyrights, Trademarks and Patents created or purchased by Borrower is valid and enforceable, and no part of the Intellectual Property created or purchased by Borrower has been judged invalid or unenforceable, in whole or in part, and no claim has been made to Borrower that any part of the Intellectual Property created or purchased by Borrower violates the rights of any third party except to the extent such claim would not reasonably be expected to cause a Material Adverse Effect.

5.5 Name; Location of Chief Executive Office. Except as disclosed in the Schedule, Borrower has not done business under any name other than that specified on the signature page hereof, and its exact legal name is as set forth in the first paragraph of this Agreement. As of the date hereof, the chief executive office of Borrower is located at the address indicated in Article 10 hereof.

5.6 Litigation. Except as set forth in the Schedule, there are no actions or proceedings pending by or against Borrower or any Subsidiary before any court or administrative agency which would reasonably be expected to have a Material Adverse Effect.

5.7 No Material Adverse Change in Financial Statements. All consolidated and consolidating, if applicable, financial statements related to Borrower and any Subsidiary that are delivered by Borrower to Agent and the Lenders fairly present in all material respects Borrower's consolidated and consolidating, if applicable, financial condition as of the date thereof and Borrower's consolidated and consolidating, if applicable, results of operations for the period then ended. There has not been a material adverse change in the consolidated or in the consolidating, if applicable, financial condition of Borrower since the date of the most recent of such financial statements submitted to Agent and the Lenders.

5.8 Solvency, Payment of Debts. Borrower is able to pay its debts (including trade debts) as they mature; the fair saleable value of Borrower's assets (including goodwill

minus disposition costs) exceeds the fair value of its liabilities; and Borrower is not left with unreasonably small capital after the transactions contemplated by this Agreement.

5.9 Compliance with Laws and Regulations. Borrower and each Subsidiary have met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. No event has occurred resulting from Borrower's failure to comply with ERISA that is reasonably likely to result in Borrower's incurring any liability that could have a Material Adverse Effect. Borrower is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Borrower is not engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T and U of the Board of Governors of the Federal Reserve System). Borrower has not violated any statutes, laws, ordinances or rules applicable to it, the violation of which would reasonably be expected to have a Material Adverse Effect. Borrower and each Subsidiary have filed or caused to be filed all tax returns required to be filed, and have paid, or have made adequate provision for the payment of, all taxes reflected therein except those being contested in good faith with adequate reserves under GAAP or where the failure to file such returns or pay such taxes would not reasonably be expected to have a Material Adverse Effect.

5.10 Subsidiaries. Borrower does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments.

5.11 Government Consents. Borrower and each Subsidiary have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Borrower's business as currently conducted, except where the failure to do so would not reasonably be expected to cause a Material Adverse Effect.

5.12 Inbound Licenses; Other Agreements. Except as disclosed on the Schedule, disclosed in accordance with Section 6.7, Borrower is not a party to, nor is bound by, any material license or other similar agreement important for the conduct of Borrower's business that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property important for the conduct of Borrower's business, other than this Agreement or the other Loan Documents.

5.13 Full Disclosure. No representation, warranty or other statement made by Borrower in any certificate or written statement furnished to Agent or any Lender in connection with the Loan Documents taken together with all such certificates and written statements furnished to Agent or any Lender contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements

not misleading in light of the circumstances in which they were made, it being recognized by Agent and the Lenders that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not to be viewed as facts and that actual results during the period or periods covered by any such projections and forecasts may differ from the projected or forecasted results.

6. AFFIRMATIVE COVENANTS.

Borrower covenants that, until payment in full of all outstanding Obligations, and for so long as any Lender may have any commitment to make a Credit Extension hereunder, Borrower shall do all of the following (unless Agent and the Required Lenders provide their prior written consent, which shall not be unreasonably withheld):

6.1 Good Standing and Government Compliance. Borrower shall maintain its and each of its Subsidiaries' corporate existence and good standing in their respective states of formation, shall maintain qualification and good standing in each other jurisdiction in which the failure to so qualify would reasonably be expected to have a Material Adverse Effect, and shall furnish to Agent the organizational identification number issued to Borrower by the authorities of the state in which Borrower is organized, if applicable. Borrower shall meet, and shall cause each Subsidiary to meet, the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. Borrower shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, and shall maintain, and shall cause each of its Subsidiaries to maintain, in force all licenses, approvals and agreements, the loss of which or failure to comply with which would reasonably be expected to have a Material Adverse Effect.

6.2 Financial Statements, Reports, Certificates. Borrower shall deliver to Agent and the Lenders: (i) as soon as available, but in any event within 30 days after the end of each calendar month, a company prepared consolidated and consolidating, if applicable, balance sheet, income statement, and statement of cash flows covering Borrower's operations during such period, in a form reasonably acceptable to Agent and the Required Lenders and certified by a Responsible Officer pursuant to a Compliance Certificate; (ii) as soon as available, but in any event within 90 days after the end of each calendar quarter, a company prepared consolidated and consolidating, if applicable, balance sheet, income statement, and statement of cash flows covering Borrower's operations during such period, in a form reasonably acceptable to Agent and the Required Lenders and certified by a Responsible Officer; (iii) as soon as available, but in any event within 180 days after the end of Borrower's fiscal year, audited (or such other level as is required pursuant to the Investment Agreement) consolidated and consolidating, if applicable, financial statements of Borrower prepared in accordance with GAAP, consistently applied, together with an opinion (which is either unqualified, qualified only for going concern solely due to Borrower's projected need for additional funding to continue operations or otherwise consented to in writing by Agent and the Required Lenders) on such financial statements of an independent certified public accounting firm reasonably acceptable to Agent and the Required Lenders; (iv) an annual budget approved by Borrower's Board of Directors as soon as available but not later than the earlier of (A) 60 days after the end of each fiscal year during the term of this Agreement or (B) five days following approval by Borrower's Board of Directors; (v) if applicable, copies of all statements, reports and notices sent or made available generally by Borrower to its security holders or to any holders of Subordinated Debt and all reports on Forms 10-K and 10-Q filed with the Securities and Exchange Commission; (vi) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened against Borrower or any Subsidiary that would reasonably be expected to result in damages or costs to Borrower or any Subsidiary of $250,000 or more; (vii) promptly upon receipt, each management letter prepared by Borrower's independent certified public accounting firm regarding Borrower's management

control systems; (viii) promptly following presentation to Borrower's Board of Directors, and no less frequently than quarterly (or more frequently if requested by Agent or the Required Lenders (such frequency not to exceed six times per year so long as no Event of Default has occurred and is continuing)), clinical program updates in the form provided to Borrower's Board of Directors with such additional information as any Lender may reasonably request from time to time; and (ix) such budgets, sales projections, operating plans or other financial information generally prepared by Borrower in the ordinary course of business as any Lender may reasonably request from time to time.

(a) Within 30 days after the last day of each month, Borrower shall deliver to Agent and the Lenders with the monthly financial statements a Compliance Certificate certified as of the last day of the applicable month and signed by a Responsible Officer in substantially the form of Exhibit D hereto, together with aged listings by invoice date of accounts receivable and accounts payable.

(b) As soon as possible and in any event within three Business Days after becoming aware of the occurrence or existence of an Event of Default hereunder, Borrower shall deliver to Agent and the Lenders a written statement of a Responsible Officer setting forth details of the Event of Default, and the action which Borrower has taken or proposes to take with respect thereto.

(c) Agent (through any of its officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrower's usual business hours but no more than once a year (unless an Event of Default has occurred and is continuing), to inspect Borrower's Books and to make copies thereof and to check, test, inspect, audit and appraise the Collateral (and Lenders (through any of their respective officers, employees or agents) shall have the right to join any such inspection) at Borrower's expense in order to verify Borrower's financial condition or the amount of, condition of, or any other matter relating to, the Collateral.

Borrower may deliver to Agent and the Lenders on an electronic basis any certificates, reports or information required pursuant to this Section 6.2, and Agent and the Lenders shall be entitled to rely on the information contained in the electronic files, provided that Agent and the Lenders in good faith believe that the files were delivered by a Responsible Officer. Borrower shall include a submission date on any certificates and reports to be delivered electronically.

6.3 Inventory and Equipment; Returns. Borrower shall keep all Inventory and Equipment in good and merchantable condition, free from all material defects except for Inventory and Equipment (a) sold in the ordinary course of business, and (b) for which adequate reserves have been made, in all cases in the United States and such other locations as to which Borrower gives prior written notice. Returns and allowances, if any, as between Borrower and its account debtors shall be on the same basis and in accordance with the usual customary practices of Borrower, as they exist on the Closing Date. Borrower shall promptly notify Agent and the Lenders of all returns and recoveries and of all written disputes and claims involving inventory having a book value of more than $100,000.

6.4 Taxes. Borrower shall make, and cause each Subsidiary to make, due and timely payment or deposit of all material federal, state, and local taxes, assessments, or contributions required of it by law, including, but not limited to, those laws concerning income taxes, F.I.C.A., F.U.T.A. and state disability, and will execute and deliver to Agent, on demand, proof satisfactory to Agent indicating that Borrower or a Subsidiary has made such payments or

deposits and any appropriate certificates attesting to the payment or deposit thereof; provided that Borrower or a Subsidiary need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by Borrower or such Subsidiary.

6.5 Insurance. Borrower, at its expense, shall (a) keep the Collateral insured against loss or damage, and (b) maintain liability and other insurance, in each case as ordinarily insured against by other owners in businesses similar to Borrower's. All such policies of insurance shall be in such form, with such companies, and in such amounts as reasonably satisfactory to Agent and the Required Lenders. All policies of property insurance shall contain a lender's loss payable endorsement, in a form reasonably satisfactory to Agent and the Required Lenders, showing Agent (for the benefit of the Lenders) as an additional loss payee, and all applicable liability insurance policies shall show Agent and each Lender as an additional insured and specify that the insurer must give at least 20 days' notice to Agent and each Lender before canceling its policy for any reason (except ten days' notice for nonpayment). Upon Agent's or any Lender's request, Borrower shall deliver to Agent and the Lenders certified copies of the policies of insurance and evidence of all premium payments. Proceeds payable under any casualty policy will, at Borrower's option, be payable to Borrower to repair or replace the property subject to the claim, provided that any such repaired or replacement property shall be deemed Collateral in which Agent (for the benefit of the Lenders) has been granted a first priority security interest, provided that, if an Event of Default has occurred and is continuing, all proceeds payable under any such policy shall, at Agent's option, be payable to Agent (for the benefit of the Lenders) to be applied on account of the Obligations.

6.6 Primary Depository. Borrower shall, within one Business Day of the Closing Date, maintain substantially all of its depository and operating accounts with Square 1 and substantially all of its primary investment accounts with Square 1 or Square 1's Affiliates; provided that, for a period of 60 days following the Closing Date, Borrower may maintain at Silicon Valley Bank (a) up to $85,000 to secure a letter of credit issued for the benefit of Borrower's landlord with respect to Borrower's lease of its offices at 100 Beaver Street, Suite 201, Waltham, MA 02453, (b) up to $35,000 to secure credit card reimbursement obligations and (c) up to $300,000 in its operating account. Borrower shall, within 60 days of the Closing Date, maintain all of its depository and operating accounts with Square 1 and its primary investment accounts with Square 1 or Square 1's Affiliates. Prior to maintaining any deposit accounts with Square 1 or any investment accounts with Square 1's Affiliates, Borrower, Agent, and any such Affiliate, as applicable, shall have entered into a deposit account control agreement or a securities account control agreement, as applicable, with respect to any such deposit accounts and investment accounts, in form and substance satisfactory to Agent and the Required Lenders.

6.7 Consent of Inbound Licensors. Within ten days after entering into or becoming bound by any material inbound license or similar agreement, Borrower shall: (a) provide written notice to Agent and the Lenders of the material terms of such license or

agreement with a description of its likely impact on Borrower's business or financial condition; and (b) upon request of Agent, in good faith use commercially reasonable efforts to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for Borrower's interest in such licenses or contract rights to be deemed Collateral and for Agent (for the benefit of the Lenders) to have a security interest in it that would reasonably be expected to otherwise be restricted by the terms of the applicable license or agreement, whether now existing or entered into in the future, provided, however, that the failure to obtain any such consent or waiver shall not constitute a default under this Agreement.

6.8 Creation/Acquisition of Subsidiaries. In the event that any Borrower or any Subsidiary of any Borrower creates or acquires any Subsidiary, Borrower or such Subsidiary shall promptly notify Agent and the Lenders of such creation or acquisition, and Borrower or such Subsidiary shall take all actions reasonably requested by Agent or any Lender to achieve any of the following with respect to such "New Subsidiary" (defined as a Subsidiary formed after the date hereof during the term of this Agreement): (a) if such New Subsidiary is organized under the laws of the United States, to cause such New Subsidiary to become either a co-Borrower hereunder, or a secured guarantor with respect to the Obligations; and (b) to grant and pledge to Agent (for the benefit of the Lenders) a perfected security interest in 100% of the stock, units or other evidence of ownership held by Borrower or its Subsidiaries of any such New Subsidiary which is organized under the laws of the United States, and 65% of the stock, units or other evidence of ownership held by Borrower or its Subsidiaries of any such New Subsidiary which is not organized under the laws of the United States.

6.9 Further Assurances. At any time and from time to time Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Agent or any Lender to effect the purposes of this Agreement.

6.10 Post-Closing. Borrower shall use its commercially reasonable efforts to deliver a fully-executed landlord waiver with respect to Borrower's lease of its offices at 100 Beaver Street, Suite 201, Waltham, MA 02453, in form and substance reasonably satisfactory to Agent and the Required Lenders on or before the date 30 days following the Closing Date.

7. NEGATIVE COVENANTS.

Borrower covenants and agrees that, so long as any credit hereunder shall be available and until the outstanding Obligations are paid in full or for so long as any Lender may have any commitment to make any Credit Extensions, Borrower will not do any of the following without Agent's and the Required Lenders' prior written consent, which shall not be unreasonably withheld:

7.1 Dispositions. Convey, sell, lease, license, transfer or otherwise dispose of (collectively, to "Transfer"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, or move Cash balances on deposit with Square 1 to accounts opened at another financial institution, other than Permitted Transfers.

7.2 Change in Name, Location, Executive Office, or Executive Management; Change in Business; Change in Fiscal Year; Change in Control. Change its

name or the state of Borrower's formation or relocate its chief executive office without 30 days' prior written notification to Agent and the Lenders; replace or suffer the departure of its chief executive officer (or, if Borrower did not have a chief executive officer, its Interim President and Chief Business Officer) or chief financial officer (or, if Borrower did not have a chief financial officer, its Senior Director of Finance) without delivering written notification to Agent and the Lenders within ten days; fail to appoint an interim replacement or fill a vacancy in the position of chief executive officer or chief financial officer for more than 60 consecutive days (it being understood and agreed that (x) Borrower currently does not have a chief executive officer and shall have no obligation to appoint an interim replacement for or fill a vacancy in such position so long as Borrower's Interim President and Chief Business Officer remains in such position and (y) Borrower currently does not have a chief financial officer and shall have no obligation to appoint an interim replacement for or fill a vacancy in such position so long as Borrower's Senior

Director of Finance remains in such position); suffer a change on its board of directors which results in the failure of at least one partner from at least one of (a) Polaris Venture Partners or its Affiliates, (b) Third Rock Ventures or its Affiliates, and (c) Lux Capital or its Affiliates to serve as a voting member (other than a change resulting from a partner of such an investor failing to be elected to the board of directors following a bona fide equity financing or series of financings in which such investor's ownership in Borrower is diluted) or suffer the resignation of one or more directors from its board of directors in anticipation of Borrower's insolvency, in either case without the prior written consent of Agent and the Required Lenders which may be withheld in Agent's and the Required Lenders' sole discretion; take action to liquidate, wind up, or otherwise cease to conduct business; engage in any business, or permit any of its Subsidiaries to engage in any business, other than or reasonably related or incidental to the businesses currently engaged in by Borrower; change its fiscal year end; or have a Change in Control.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of a Subsidiary into another Subsidiary or into Borrower), or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person except where (a) each of the following conditions is applicable: (i) the consideration paid in connection with such transactions (including assumption of liabilities) does not in the aggregate exceed $100,000 during any fiscal year, (ii) no Event of Default has occurred, is continuing or would exist after giving effect to such transactions, (iii) such transactions do not result in a Change in Control, and (iv) Borrower is the surviving entity; or (b) the Obligations are repaid in full concurrently with the closing of any merger or consolidation of Borrower in which Borrower is not the surviving entity; provided, however, that Borrower shall not, without Agent's and the Required Lenders' prior written consent, enter into any binding contractual arrangement with any investment bank, broker, financial advisor or similar Person to attempt to facilitate a merger or acquisition of Borrower, unless (i) no Event of Default exists when such agreement is entered into by Borrower, (ii) such agreement does not give such Person the right to claim any fee, payment or damages from any parties, other than from Borrower or Borrower's investors, in connection with a sale of Borrower's stock or assets pursuant to or resulting from an assignment for the benefit of creditors, an asset turnover to Borrower's creditors (including, without limitation, the Lenders), foreclosure, bankruptcy or similar liquidation, and (iii) Borrower notifies Agent and the Lenders in advance of entering into such an agreement (provided that the failure to give such notification shall not be deemed a breach of this Agreement).

7.4 Indebtedness. Create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except Indebtedness to the Lenders.

7.5 Encumbrances. Create, incur, assume or allow any Lien with respect to its property, or assign or otherwise convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries so to do, except for Permitted Liens, or covenant to any other Person (other than (a) the licensors of in-licensed property with respect to such property, (b) the lessors of specific equipment or lenders financing specific equipment with respect to such leased or financed equipment or (c) Schedule 7.5) that Borrower in the future will refrain from creating, incurring, assuming or allowing any Lien with respect to any of Borrower's property, except for licenses and agreements containing customary anti-assignment provisions so long as such provisions are, or would be, rendered unenforceable or ineffective under applicable law (including, without limitation, Sections 9-406, 9-407 and 9-408 of the Code).

7.6 Distributions. Pay any dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock, except that Borrower may (a) repurchase the stock of former employees or directors pursuant to stock repurchase agreements in an aggregate amount not to exceed $100,000 in any fiscal year, so long as an Event of Default does not exist prior to such repurchase or would not exist after giving effect to such repurchase, and (b) repurchase the stock of former employees or directors pursuant to stock repurchase agreements in any amount where the consideration for the repurchase is the cancellation of indebtedness owed by such former employees or directors to Borrower regardless of whether an Event of Default exists.

7.7 Investments. Directly or indirectly acquire or own an Investment in, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments, or maintain or invest any of its investment property with a Person other than Square 1 and Square 1's Affiliates or permit any Subsidiary to do so unless such Person has entered into a control agreement with Agent (for the benefit of the Lenders), in form and substance reasonably satisfactory to Agent and the Required Lenders, or suffer or permit any Subsidiary to be a party to, or be bound by, an agreement that restricts such Subsidiary from paying dividends or otherwise distributing property to Borrower.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's-length transaction with a non-affiliated Person and except for transactions permitted under Section 7.9.

7.9 Subordinated Debt. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except in compliance with the terms of such Subordinated Debt, or amend any provision affecting Agent's or the Lenders' rights contained in any documentation relating to the Subordinated Debt without Agent's and the Required Lenders' prior written consent.

7.10 Inventory and Equipment. Store Inventory or Equipment with a book value in excess of $100,000 with a bailee, warehouseman, collocation facility or similar third party (other than equipment in transit or held for repair in the ordinary course of Borrower's business) unless the third party has been notified of Agent's security interest and Agent (a) has received an acknowledgment from the third party that it is holding or will hold the Inventory or Equipment for Agent's benefit or (b) is in possession of the warehouse receipt, where negotiable, covering such Inventory or Equipment. Except for Inventory sold in the ordinary course of business and for movable items of personal property having an aggregate book value not in excess of $100,000, and except for such other locations as Agent may approve in writing, Borrower shall keep the Inventory and Equipment only at the locations set forth on Schedule 7.10 and such other locations of which Borrower gives Agent and the Lenders prior written notice and as to which Agent is able to take such actions as may be reasonably necessary to perfect its security interest or to obtain a bailee's acknowledgment of Agent's rights in the Collateral.

7.11 No Investment Company; Margin Regulation. Become or be controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Credit Extension for such purpose.

8. EVENTS OF DEFAULT.

Any one or more of the following events shall constitute an Event of Default by Borrower under this Agreement:

8.1 Payment Default. If Borrower fails to pay any of the Obligations when due;

8.2 Covenant Default.

(a) If Borrower fails to perform any obligation under Section 6.2 (financial reporting), 6.4 (taxes), 6.5 (insurance), or 6.6 (primary accounts), or violates any of the covenants contained in Article 7 of this Agreement; or

(b) If Borrower fails or neglects to perform or observe any other material term, provision, condition, or covenant contained in this Agreement, in any of the Loan Documents, or in any other present or future agreement between Borrower and Agent and/or any Lender and as to any default under such other term, provision, condition or covenant that can be cured, has failed to cure such default within ten days after Borrower receives notice thereof or any officer of Borrower becomes aware thereof; provided, however, that if the default cannot by its nature be cured within the ten-day period or cannot after diligent attempts by Borrower be cured within such ten-day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional reasonable period (which shall not in any case exceed 30 days) to attempt to cure such default, and within such reasonable time period the failure to have cured such default shall not be deemed an Event of Default but no Credit Extensions will be made;

8.3 Material Adverse Change. If there occurs any circumstance or any circumstances which would reasonably be expected to have a Material Adverse Effect;

8.4 Attachment. If any material portion of Borrower's assets is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within ten days, or if Borrower is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, or if a judgment or other claim becomes a lien or encumbrance upon any material portion of Borrower's assets, or if a notice of lien, levy, or assessment is filed of record with respect to any material portion of Borrower's assets by the United States Government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within ten days after Borrower receives notice thereof, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by Borrower (provided that no Credit Extensions will be made during such cure period);

8.5 Insolvency. If Borrower becomes insolvent, or if an Insolvency Proceeding is commenced by Borrower, or if an Insolvency Proceeding is commenced against Borrower and is not dismissed or stayed within 45 days (provided that no Credit Extensions will be made prior to the dismissal of such Insolvency Proceeding);

8.6 Other Agreements. If there is a default or other failure to perform in any agreement to which Borrower is a party with a third party or parties (a) resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of $250,000, (b) in connection with any lease of real property material to the conduct of Borrower's business, if such default or failure to perform results in the right of another party, whether or not exercised, to terminate such lease, or (c) that would reasonably be expected to have a Material Adverse Effect;

8.7 Judgments. If a final non-appealable, uninsured judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least $250,000 shall be rendered against Borrower and shall remain unsatisfied and unstayed for a period of ten days (provided that no Credit Extensions will be made prior to the satisfaction or stay of the judgment); or

8.8 Misrepresentations. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to Agent or any Lender by any Responsible Officer pursuant to this Agreement or to induce Agent or any Lender to enter into this Agreement or any other Loan Document.

9. LENDERS' RIGHTS AND REMEDIES.

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Agent may, and at the written direction of the Required Lenders shall,

without notice of its election and without demand, do any one or more of the following, all of which are authorized by Borrower:

(a) Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, immediately due and payable (provided that, upon the occurrence of an Event of Default described in Section 8.5 (insolvency), all Obligations shall become immediately due and payable without any action by Agent or the Lenders);

(b) Notify Borrower that Lenders are ceasing advancing money or extending credit to or for the benefit of Borrower under this Agreement and/or under any other agreement between Borrower and Agent and/or any Lender;

(c) Settle or adjust disputes and claims directly with account debtors for amounts, upon terms and in whatever order that Agent reasonably considers advisable;

(d) Make such payments and do such acts as Agent considers necessary or reasonable to protect its security interest in the Collateral. Borrower agrees to assemble the Collateral if Agent so requires, and to make the Collateral available to Agent as Agent may designate. Borrower authorizes Agent to enter the premises where the Collateral is located, to take and maintain possession of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Agent's determination appears to be prior or superior to its security interest and to pay all expenses incurred in connection therewith. With respect to any of Borrower's owned premises, Borrower hereby grants Agent a license to enter into possession of such premises and to occupy the same, without charge, in order to exercise any of Agent's rights or remedies provided herein, at law, in equity, or otherwise;

(e) Set off and apply to the Obligations any and all (i) balances and deposits of Borrower held by a Lender, and (ii) indebtedness at any time owing to or for the credit or the account of Borrower held by a Lender;

(f) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Agent is hereby granted a license or other right, solely pursuant to the provisions of this Section 9.1, to use, without charge, Borrower's labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Agent's exercise of its rights under this Section 9.1, Borrower's rights under all licenses and all franchise agreements shall inure to Agent's benefit;

(g) Sell the Collateral at either a public or private sale, or both, by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Borrower's premises) as is commercially reasonable, and apply any proceeds to the Obligations in whatever manner or order Agent deems appropriate. Agent may sell the Collateral without giving any warranties as to the Collateral. Agent may specifically disclaim any warranties of title or the like. This procedure will not be considered adversely to affect the

commercial reasonableness of any sale of the Collateral. If Agent sells any of the Collateral upon credit, Borrower will be credited only with payments actually made by the purchaser, received by Agent, and applied to the indebtedness of the purchaser. If the purchaser fails to pay for the Collateral, Agent may resell the Collateral and Borrower shall be credited with the proceeds of the sale;

(h) Credit bid and purchase at any public sale;

(i) Apply for the appointment of a receiver, trustee, liquidator or conservator of the Collateral, without notice and without regard to the adequacy of the security for the Obligations and without regard to the solvency of Borrower, any guarantor or any other Person liable for any of the Obligations; and

(j) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrower.

Agent's compliance with any applicable state or federal law requirements in connection with a disposition of the Collateral will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral.

9.2 Power of Attorney. Effective only upon the occurrence and during the continuance of an Event of Default, Borrower hereby irrevocably appoints Agent (and any of Agent's designated officers or employees) (for the benefit of the Lenders) as Borrower's true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of Agent's security interest in the Accounts; (b) endorse Borrower's name on any checks or other forms of payment or security that may come into Agent's possession; (c) sign Borrower's name on any invoice or bill of lading relating to any Account, drafts against account debtors, schedules and assignments of Accounts, verifications of Accounts, and notices to account debtors; (d) dispose of any Collateral; (e) make, settle, and adjust all claims under and decisions with respect to Borrower's policies of insurance; (f) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Agent determines to be reasonable; and (g) file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral; provided that Agent may exercise such power of attorney to sign the name of Borrower on any of the documents described in clause (g) above, regardless of whether an Event of Default has occurred. The appointment of Agent as Borrower's attorney in fact, and each and every one of Agent's rights and powers, being coupled with an interest, is irrevocable until all of the Obligations have been fully repaid and performed, and each Lender's obligation to provide advances hereunder is terminated.

9.3 Accounts Collection. At any time after the occurrence and during the continuation of an Event of Default, Agent may notify any Person owing funds to Borrower of Agent's security interest in such funds and verify the amount of such Account. Borrower shall collect all amounts owing to Borrower for Agent, receive in trust all payments as Agent's trustee, and immediately deliver such payments to Agent (for the benefit of the Lenders) in their original form as received from the account debtor, with proper endorsements for deposit.

9.4 Lender Expenses. If Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Agent may do any or all of the following after reasonable notice to Borrower: (a) make payment of the same or any part thereof; or (b) obtain and maintain insurance policies of the type discussed in Section 6.5 of this Agreement, and take any action with respect to such policies as Agent deems prudent. Any amounts so paid or deposited by Agent shall constitute Lender Expenses, shall be immediately due and payable, shall bear interest at the then applicable rate hereinabove provided, and shall be secured by the Collateral. Any payments made by Agent shall not constitute an agreement by Agent or any Lender to make similar payments in the future or a waiver by Agent of any Event of Default under this Agreement.

9.5 Liability for Collateral; Duty of Agent With Respect to Collateral; Marshaling.

(a) Agent and the Lenders have no obligation to clean up or otherwise prepare the Collateral for sale. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower.

(b) Agent's and each Lender's sole duty with respect to the custody, safekeeping and physical preservation of the Collateral in Agent's or the Lender's possession shall be to deal with it in the same manner as Agent and the Lender, as applicable, deals with similar property for its own account. The powers conferred on Agent and the Lenders hereunder are solely to protect Agent's and the Lenders' interest in the Collateral and shall not impose any duty upon Agent or any Lender to exercise any such powers. Agent and each Lender shall be accountable only for amounts that Agent or the Lender receives as a result of the exercise of such powers, and neither Agent nor any Lender shall be responsible to Borrower for any act or failure to act hereunder, except for its own gross negligence or willful misconduct as finally determined by a non-appealable judgment of a court of competent jurisdiction. In addition, neither Agent nor any Lender shall be liable or responsible for any loss or damage to any Collateral, or for any diminution in the value thereof, by reason of the act or omission of any warehousemen, carrier, forwarding agency, consignee or other bailee selected by it in good faith. Agent may (but shall not be obligated to except at the request of the Required Lenders) pay taxes on behalf of Borrower, satisfy any Liens against the Collateral (other than Permitted Liens), purchase insurance to protect Agent's and the Lenders' interest if Borrower fails to maintain the insurance required hereunder and pay for the maintenance, insurance, protection and preservation of the Collateral and effect compliance with the terms of any Loan Document. Borrower agrees to reimburse Agent, on demand, for all costs and expenses incurred by Agent in connection with such payment or performance and agrees that such amounts shall constitute Obligations. Borrower hereby (i) waives any right under the UCC or any other applicable law to receive notice and/or copies of any filed or recorded financing statements, amendments thereto, continuations thereof or termination statements and (ii) releases and excuses Agent and each Lender from any obligation under the UCC or any other applicable law to provide notice or a copy of any such filed or recorded documents.

(c) Neither Agent nor any Lender shall be under any obligation to marshal any property in favor of Borrower or any other Person or against or in payment of any Obligation.

9.6 No Obligation to Pursue Others. Agent and the Lenders have no obligation to attempt to satisfy the Obligations by collecting them from any other person liable for them, and Agent may release, modify or waive any collateral provided by any other Person to secure any of the Obligations, all without affecting Agent's and the Lenders' rights against Borrower. Borrower waives any right it may have to require Agent or any Lender to pursue any other Person for any of the Obligations.

9.7 Remedies Cumulative. Agent's and the Lenders' rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Agent and the Lenders shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by Agent or any Lender of one right or remedy shall be deemed an election, and no waiver by Agent or any Lender of any Event of Default on Borrower's part shall be deemed a continuing waiver. No delay by Agent or any Lender shall constitute a waiver, election, or acquiescence by it. No waiver by Agent or any Lender shall be effective unless made in a written document signed on behalf of Agent and the Required Lenders and then shall be effective only in the specific instance and for the specific purpose for which it was given. Borrower expressly agrees that this Section 9.7 may not be waived or modified by Agent or any Lender by course of performance, conduct, estoppel or otherwise.

9.8 Demand; Protest. Except as otherwise provided in this Agreement, Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment and any other notices relating to the Obligations.

10. NOTICES.

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this Agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by a recognized overnight delivery service, certified mail, postage prepaid, return receipt requested, or by telefacsimile to Borrower, to Agent or to the Lenders, as the case may be, at its address set forth below:

If to Borrower:	Kala Pharmaceuticals, Inc. Attn: Mary Reumuth 100 Beaver Street, Suite 201 Waltham, MA 02453 FAX: (781) 642-0399
With a copy (which will not constitute notice) to:	Wilmer Cutler Pickering Hale and Dorr LLP Attn: Jamie N. Class, Esq. 60 State Street Boston, MA 02446 FAX: (617) 526-5000

If to Agent:	Square 1 Bank Attn: Loan Operations Manager Durham, NC 27701 FAX: (919) 314-3080
If to a Lender:	To such Lender's address on Schedule 1

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other.

11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER.

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of North Carolina, without regard to principles of conflicts of law. Jurisdiction shall lie in the State of North Carolina. All disputes, controversies, claims, actions and similar proceedings arising with respect to Borrower's account or any related agreement or transaction shall be brought in the General Court of Justice of North Carolina sitting in Durham County, North Carolina or the United States District Court for the Middle District of North Carolina, except as provided below with respect to arbitration of such matters. AGENT, EACH LENDER AND BORROWER EACH ACKNOWLEDGE THAT THE RIGHT TO TRIAL BY JURY IS A CONSTITUTIONAL ONE, BUT THAT IT MAY BE WAIVED. EACH OF THEM, AFTER CONSULTING OR HAVING HAD THE OPPORTUNITY TO CONSULT WITH COUNSEL OF THEIR CHOICE, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ANY RIGHT ANY OF THEM MAY HAVE TO A TRIAL BY JURY IN ANY LITIGATION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY RELATED INSTRUMENT OR LOAN DOCUMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT OR ANY COURSE OF CONDUCT, DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN), OR ACTION OF ANY OF THEM. THESE PROVISIONS SHALL NOT BE DEEMED TO HAVE BEEN MODIFIED IN ANY RESPECT OR RELINQUISHED BY AGENT, ANY LENDER OR BORROWER, EXCEPT BY A WRITTEN INSTRUMENT EXECUTED BY EACH OF THEM. If the jury waiver set forth in this Article 11 is not enforceable, then any dispute, controversy, claim, action or similar proceeding arising out of or relating to this Agreement, the Loan Documents or any of the transactions contemplated therein shall be settled by final and binding arbitration held in Durham County, North Carolina in accordance with the then current Commercial Arbitration Rules of the American Arbitration Association by one arbitrator appointed in accordance with those rules. The arbitrator shall apply North Carolina law to the resolution of any dispute, without reference to rules of conflicts of law or rules of statutory arbitration. Judgment upon any award resulting from arbitration may be entered into and enforced by any state or federal court having jurisdiction thereof. Notwithstanding the foregoing, the parties may apply to any court of competent jurisdiction for preliminary or interim equitable relief, or to compel arbitration in accordance with this Article. The costs and expenses of the arbitration, including without limitation, the arbitrator's fees and expert witness fees, and reasonable attorneys' fees, incurred by the parties to the arbitration may be awarded to the prevailing party, in the discretion of the arbitrator, or may be apportioned between the parties in any manner deemed appropriate by the arbitrator. Unless and until the arbitrator decides that one party is to pay for all (or a share) of

such costs and expenses, both parties shall share equally in the payment of the arbitrator's fees as and when billed by the arbitrator.

12. GENERAL PROVISIONS.

12.1 Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and permitted assigns of each of the parties and shall bind all persons who become bound as a debtor to this Agreement. Borrower may not transfer, pledge or assign this Agreement or any rights or obligations under it without Agent's and each Lender's prior written consent (which may be granted or withheld in Agent's and each Lender's sole discretion). The Lenders have the right without the consent of or notice to Borrower to sell, transfer, assign, pledge, negotiate or grant a participation in (any such sale, transfer, assignment, negotiation or grant of a participation, a "Lender Transfer") all or any part of, or any interest in, the Lenders' obligations, rights and benefits under this Agreement and the other Loan Documents; provided, however, that any such Lender Transfer of its obligations, rights and benefits under this Agreement and the other Loan Documents shall (a) be in minimum increments of $1,000,000 or, if the remaining outstanding principal amount of the obligations owing to such Lender is less than $1,000,000, then the entirety of such lesser amount, and (b) except with respect to a Lender Transfer to the transferring Lender's Affiliate, another Lender or an Affiliate of another Lender, require the prior written consent of Agent which consent shall not be unreasonably withheld or delayed. Borrower and Agent shall be entitled to continue to deal solely and directly with such Lender in connection with the interests so assigned until Agent shall have received and accepted an effective assignment agreement in form satisfactory to Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such transferee as Agent reasonably shall require.

12.2 Indemnification. Borrower shall defend, indemnify and hold harmless Agent, each Lender and their respective officers, employees, and agents (each an "Indemnified Person") against: (a) all obligations, demands, claims, and liabilities claimed or asserted (collectively, "Claims") by any other party in connection with the transactions contemplated by this Agreement; and (b) all losses or Lender Expenses in any way suffered, incurred, or paid by any Indemnified Person as a result of or in any way arising out of, following, or consequential to transactions between Borrower and Agent and/or any Lender whether under this Agreement, or otherwise (including without limitation reasonable attorneys' fees and expenses), except for Claims, losses and/or Lender Expenses caused by an Indemnified Person's gross negligence or willful misconduct.

12.3 Time of Essence. Time is of the essence for the performance of all obligations set forth in this Agreement.

12.4 Severability of Provisions. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.

12.5 Amendments, Waivers; Integration.

(a) No amendment, modification, termination or waiver of any provision of any Loan Document, and no consent with respect to any departure by Borrower therefrom, shall be effective unless the same shall be in writing and signed by Agent, the Required Lenders (or by Agent with the consent of the Required Lenders) and Borrower; provided that no such amendment, waiver or consent shall, unless in writing and signed by all of the Lenders directly affected thereby (or by Agent with the written consent of all of the Lenders directly affected thereby), in addition to Agent, the Required Lenders (or by Agent with the written consent of the Required Lenders) and Borrower, do any of the following: (i) increase or decrease the amount of any Term Loan Commitment Amount (which shall be deemed to affect all of the Lenders), (ii) reduce the principal of or rate of interest on (other than waiving the imposition of the Default Rate) any Credit Extension or reduce the amount of any fees payable under any Loan Document, (iii) postpone the date fixed for or reduce or waive any scheduled installment of principal or any payment of interest or fees due to any Lender under the Loan Documents, (iv) release or subordinate the Lien on all or substantially all of the Collateral, or consent to a transfer of all or substantially all of the Collateral or Intellectual Property, in each case, except as otherwise may be provided in any Loan Document (which shall be deemed to affect all of the Lenders), (v) release Borrower from, or consent to Borrower's assignment or delegation of, Borrower's obligations under the Loan Documents (which shall be deemed to affect all of the Lenders), except as otherwise may be provided in any Loan Document, (vi) amend or modify the definition of "Required Lenders" or "Pro Rata Share" or any provision providing for the consent or other action by all of the Lenders, or (vii) amend, modify, terminate or waive this Section 12.5(a).

(b) Notwithstanding any provision in Section 12.5(a) to the contrary, (i) Agent may amend Schedule 1 to reflect assignments permitted hereunder and (ii) Agent and Borrower may amend or modify any Loan Document to grant a new Lien, extend an existing Lien over additional property or join additional Persons as credit parties hereunder, in each case for the benefit of Agent and the Lenders.

(c) All prior agreements, understandings, representations, warranties and negotiations between Borrower and the Lenders with respect to the subject matter of this Agreement and the other Loan Documents, if any, are merged into this Agreement and the Loan Documents.

12.6 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement. Executed copies of the signature pages of this Agreement sent by facsimile or transmitted electronically in Portable Document Format (PDF), or any similar format, shall be treated as originals, fully binding and with full legal force and effect, and the parties waive any rights they may have to object to such treatment.

12.7 Survival. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations remain outstanding or any Lender has any obligation to make any Credit Extension to Borrower. The obligations of

Borrower to indemnify Agent and the Lenders with respect to the expenses, damages, losses, costs and liabilities described in Section 12.2 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Agent and/or any Lender have run.

12.8 Confidentiality. In handling any confidential information, Agent, the Lenders, Borrower and all employees and agents of each such party shall exercise the same degree of care that such party exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information provided by or on behalf of such party pursuant to the Loan Documents or upon request of such party, except that disclosure of such information may be made (a) in the case of Agent and the Lenders, to the subsidiaries or Affiliates of Agent or any Lender in connection with their present or

prospective business relations with Borrower, provided that such subsidiaries or Affiliates are bound by confidentiality obligations substantially the same as those of this Section 12.8, (b) in the case of Agent or any Lender, to prospective transferees or purchasers of any interest in the Credit Extensions, provided that they have entered into a comparable confidentiality agreement in favor of Borrower and have delivered a copy to Borrower, (c) as requested or required by law, regulations, rule or order (including, without limitation, the rules or regulations of any regulatory authority having jurisdiction over such party or its securities or stock exchange on which such party's securities are traded), in legal proceedings, by subpoena, civil investigative demand or judicial order or by other similar order or process, (d) in the case of Agent and the Lenders, as may be required in connection with the examination, audit or similar investigation of Agent or any Lender, (e) as Agent or any Lender may determine in connection with the enforcement of any remedies hereunder or (f) to a Representative of Agent, the Lenders or Borrower, provided that such Representative is bound by either confidentiality obligations substantially the same as those of this Section 12.8 with the party providing it confidential information or other legal or fiduciary obligation to such party. Confidential information hereunder shall not include information that either: (i) is in the public domain or in the knowledge or possession of the receiving party when disclosed to such party, or becomes part of the public domain after disclosure to such receiving party through no fault of such receiving party; or (ii) is disclosed to such receiving party by a third party, provided that the receiving party does not have actual knowledge that such third party is prohibited from disclosing such information.

13. AGENT.

13.1 Appointment and Authority.

(a) Each Lender hereby appoints Square 1 (together with any successor Agent pursuant to Section 13.7) as Agent under the Loan Documents and authorizes Agent to (i) execute and deliver the Loan Documents and accept delivery thereof on its behalf from Borrower, (ii) take such action on its behalf and to exercise all rights, powers and remedies and perform the duties as are expressly delegated to Agent under the Loan Documents, and (iii) exercise such powers as are reasonably incidental thereto. The provisions of this Article 13 are solely for the benefit of Agent and the Lenders, and Borrower shall have no rights as a third-party beneficiary of any of such provisions.

(b) Without limiting the generality of clause (a) above, Agent shall have the sole and exclusive right and authority (to the exclusion of the Lenders) and is hereby authorized to (i) act as the disbursing and collecting agent for the Lenders with respect to all payments and collections arising in connection with the Loan Documents (including in any other bankruptcy, insolvency or similar proceeding), and each Person making any payment in connection with any Loan Document to any Lender is hereby authorized to make such payment to Agent, (ii) file and prove claims and file other documents necessary or desirable to allow the claims of Agent and the Lenders with respect to any Obligations in any bankruptcy, insolvency or similar proceeding, (iii) act as collateral agent for Agent and each Lender for purposes of the perfection, holding and enforcing of all Liens created by the Loan Documents and all other purposes stated therein, together with such powers and discretion as are reasonably incidental thereto and (iv) execute any amendment, consent or waiver under the Loan Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver; provided, however, that Agent hereby appoints, authorizes and directs each Lender to act as collateral sub-agent for Agent and the Lenders for purposes of the perfection of all Liens with respect to the Collateral, including any deposit account maintained by Borrower with, and cash held by, such Lender, and may further authorize and direct the Lenders to take further actions as collateral sub-agents for purposes of enforcing such Liens or otherwise to transfer the Collateral subject thereto to Agent, and each Lender hereby agrees to take such further actions to the extent, and only to the extent, so authorized and directed. Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, any Loan Document by or through any trustee, co-agent, employee, attorney-in-fact and any other Person (including any other Lender). Any such Person shall benefit from this Article 13 to the extent provided by Agent but shall only have obligations to Agent and not to Borrower, any Lender or any other Person, and neither Borrower, any Lender nor any other Person shall have any rights, directly or indirectly, as a third-party beneficiary or otherwise against any such Person.

(c) The Lenders irrevocably authorize Agent to release any Lien on any property granted to or held by Agent under any Loan Document (i) upon all of the Obligations (other than contingent obligations not yet accrued and payable) having been paid in full and so long as no Lender has any commitment to make any Credit Extensions, (ii) that is disposed of as part of or in connection with any Permitted Transfer, (iii) subject to Section 12.5, if approved, authorized or ratified in writing by the Required Lenders or (iv) as expressly provided in any of the other Loan Documents. Upon request by Agent at any time, the Required Lenders will confirm in writing Agent's authority to release its interest in particular types or items of property. In each case as specified in this Section 13.1(c), Agent will, at Borrower's expense, execute and deliver to Borrower such documents as Borrower may reasonably request to evidence the release of items of Collateral from the assignment and security interest granted under the Loan Documents, in each case in accordance with the terms of the Loan Documents and this Section 13.1(c); provided that Borrower shall have delivered to Agent a certificate of a Responsible Officer of Borrower certifying that any such transaction has been consummated in compliance with this Agreement and the other Loan Documents as Agent shall reasonably request.

(d) Under the Loan Documents, Agent (i) is acting solely on behalf of the Lenders, with duties that are entirely administrative in nature, notwithstanding the use of the

defined term "Agent", the terms "agent", "Agent" and "collateral agent" and similar terms in any Loan Document to refer to Agent, which terms are used for title purposes only, (ii) is not assuming any obligation under any Loan Document other than as expressly set forth herein or therein or any role as agent, fiduciary or trustee of or for any Lender or any other Person, and (iii) shall have no implied functions, responsibilities, duties, obligations or other liabilities under any Loan Document. Each Lender, by accepting the benefits of the Loan Documents, hereby waives and agrees not to assert any claim against Agent based on the roles, duties and legal relationships expressly disclaimed in clauses (i) through (iii) above.

13.2 Binding Effect; Use of Discretion.

(a) Each Lender, by accepting the benefits of the Loan Documents, agrees that (i) any action taken by Agent or the Required Lenders (or, if expressly required in any Loan Document, a greater proportion of the Lenders) in accordance with the provisions of the Loan Documents, (ii) any action taken by Agent in reliance upon the instructions of the Required Lenders (or, where so required, such greater proportion), and (iii) the exercise by Agent or the Required Lenders (or, where so required, such greater proportion) of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of the Lenders.

(b) If Agent shall request instructions from the Required Lenders or all of the affected Lenders with respect to any act or action (including failure to act) in connection with any Loan Document, then Agent shall be entitled to refrain from such act or taking such action unless and until Agent shall have received instructions from the Required Lenders or all of the affected Lenders, as the case may be, and Agent shall not incur liability to any Person by reason of so refraining. Agent shall be fully justified in failing or refusing to take any action under any Loan Document (i) if such action would, in the opinion of Agent, be contrary to any requirement of law or any Loan Document, (ii) if such action would, in the opinion of Agent, expose Agent to any potential liability under

any requirement of law, or (iii) if Agent shall not first be indemnified to its satisfaction against any and all liability and expense which may be incurred by it by reason of taking or continuing to take any such action. Without limiting the foregoing, no Lender shall have any right of action whatsoever against Agent as a result of Agent acting or refraining from acting under any Loan Document in accordance with the instructions of the Required Lenders or all of the affected Lenders, as applicable.

13.3 Agent's Reliance, Etc. Agent may, without incurring any liability hereunder, (a) consult with any of its Related Persons and, whether or not selected by it, any other advisors, accountants and other experts (including advisors to, and accountants and experts engaged by, Borrower) and (b) rely and act upon any document and information (including those transmitted by electronic transmission) and any telephone message or conversation, in each case believed by it to be genuine and transmitted, signed or otherwise authenticated by the appropriate parties. None of Agent and its Related Persons shall be liable for any action taken or omitted to be taken by any of them under or in connection with any Loan Document, and each Lender and Borrower hereby waives and shall not assert (and Borrower shall cause its Subsidiaries to waive and agree not to assert) any right, claim or cause of action based thereon, except to the extent of liabilities resulting from the gross negligence or willful misconduct of Agent or, as the case may be, such Related Person (each as determined in a final, non-appealable judgment of a court of

competent jurisdiction) in connection with the duties of Agent expressly set forth herein. Without limiting the foregoing, Agent: (i) shall not be responsible or otherwise incur liability for any action or omission taken in reliance upon the instructions of the Required Lenders or for the actions or omissions of any of its Related Persons, except to the extent that a court of competent jurisdiction determines in a final non-appealable judgment that Agent acted with gross negligence or willful misconduct in the selection of such Related Person; (ii) shall not be responsible to any Lender or other Person for the due execution, legality, validity, enforceability, effectiveness, genuineness, sufficiency or value of, or the attachment, perfection or priority of any Lien created or purported to be created under or in connection with, any Loan Document; (iii) makes no warranty or representation, and shall not be responsible, to any Lender or other Person for any statement, document, information, representation or warranty made or furnished by or on behalf of Borrower or any Related Person of Borrower in connection with any Loan Document or any transaction contemplated therein or any other document or information with respect to Borrower, whether or not transmitted or (except for documents expressly required under any Loan Document to be transmitted to the Lenders) omitted to be transmitted by Agent, including as to completeness, accuracy, scope or adequacy thereof, or for the scope, nature or results of any due diligence performed by Agent in connection with the Loan Documents; and (iv) shall not have any duty to ascertain or to inquire as to the performance or observance of any provision of any Loan Document, whether any condition set forth in any Loan Document is satisfied or waived, as to the financial condition of Borrower or as to the existence or continuation or possible occurrence or continuation of any default or Event of Default, and shall not be deemed to have notice or knowledge of such occurrence or continuation unless it has received a notice from Borrower or any Lender describing such default or Event of Default that is clearly labeled "notice of default" (in which case Agent shall promptly give notice of such receipt to all of the Lenders, provided that Agent shall not be liable to any Lender for any failure to do so, except to the extent that such failure is attributable to Agent's gross negligence or willful misconduct as determined by a final non-appealable judgment of a court of competent jurisdiction); and, for each of the items set forth in clauses (i) through (iv) above, each Lender and Borrower hereby waives and agrees not to assert (and Borrower shall cause its Subsidiaries to waive and agree not to assert) any right, claim or cause of action it might have against Agent based thereon. No Lender shall have any right of action whatsoever against Agent as a result of Agent acting or (where so instructed) refraining from acting hereunder or under any of the other Loan Documents in accordance with the instructions of the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents).

13.4 Agent Individually. Agent and its Affiliates may make loans and other extensions of credit to, acquire stock of, accept deposits from, and engage in any kind of business with, Borrower or any Affiliate thereof as though it were not acting as Agent and may receive separate fees and other payments therefor. To the extent Agent or any of its Affiliates is or becomes a Lender hereunder, it shall have and may exercise the same rights and powers hereunder and shall be subject to the same obligations and liabilities as any other Lender, and the terms "Lender", "Required Lender" and any similar terms shall, except where otherwise expressly provided in any Loan Document, include, without limitation, Agent or such Affiliate, as the case may be, in its individual capacity as a Lender, or as one of the Required Lenders.

13.5 Lender Credit Decision. Each Lender acknowledges that it shall, independently and without reliance upon Agent, any Lender or any of their Related Persons or

upon any document solely or in part because such document was transmitted by Agent or any of its Related Persons, conduct its own independent investigation of the financial condition and affairs of Borrower and make and continue to make its own credit decisions in connection with entering into, and taking or not taking any action under, any Loan Document or with respect to any transaction contemplated in any Loan Document, in each case based on such documents and information as it shall deem appropriate. Except for documents expressly required by any Loan Document to be transmitted by Agent to the Lenders, Agent shall not have any duty or responsibility to provide any Lender with credit or any other information concerning Borrower, including with respect to its business, prospects, operations, property, financial and other conditions or creditworthiness, or any Affiliate of Borrower, that may come into the possession of Agent (whether in its capacity as Agent or otherwise) or any of its Related Persons.

13.6 Indemnification.

(a) Each Lender agrees to reimburse Agent and each of its Related Persons (to the extent not reimbursed by Borrower) promptly upon demand for its Pro Rata Share of any out-of-pocket costs and expenses (including, without limitation, fees, charges and disbursements of financial, legal and other advisors and any taxes or insurance paid in the name of, or on behalf of, Borrower) incurred by Agent or any of its Related Persons in connection with the preparation, execution, delivery, administration, modification, amendment, consent, waiver or enforcement of, or the taking of any other action (whether through negotiations, through any work-out, bankruptcy, restructuring or other legal or other proceeding (including, without limitation, preparation for and/or response to any subpoena or request for document production relating thereto) or otherwise) in respect of, or legal advice with respect to, its rights or responsibilities under, any Loan Document. Each Lender further agrees to indemnify Agent and each of its Related Persons (to the extent not indemnified by Borrower), ratably according to its Pro Rata Share, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever (including, to the extent not indemnified by the applicable Lender, taxes, interests and penalties imposed for not properly withholding or backup withholding on payments made to or for the account of any Lender) that may be imposed on, incurred by, or asserted against Agent or any of its Related Persons in any matter relating to or arising out of, in connection with or as a result of any Loan Document or any other act, event or transaction related, contemplated in or attendant to any such document, or, in each case, any action taken or omitted to be taken by Agent or any of its Related Persons under or with respect to the foregoing; provided that no Lender shall be liable to Agent or any of its Related Persons under this Section 13.6 to the extent such liability has resulted from the gross negligence or willful misconduct of Agent or, as the case may be, such Related Person, as determined by a final non-appealable judgment of a court of competent jurisdiction.

(b) To the extent required by any applicable requirement of law, Agent may withhold from any payment to any Lender under a Loan Document an amount equal to any applicable withholding tax. If the Internal Revenue Service or any other governmental authority asserts a claim that Agent did not properly withhold tax from amounts paid to or for the account of any Lender for any reason, or if Agent reasonably determines that it was required to withhold taxes from a prior payment to or for the account of any Lender but failed to do so, such Lender shall promptly indemnify Agent fully for all amounts paid, directly or indirectly, by Agent as tax

or otherwise, including penalties and interest, and together with all expenses incurred by Agent. Agent may offset against any payment to any Lender under a Loan Document any applicable withholding tax that was required to be withheld from any prior payment to such Lender but which was not so withheld, as well as any other amounts for which Agent is entitled to indemnification from such Lender under the immediately preceding sentence of this Section 13.6.

13.7 Successor Agent. Agent may resign at any time by delivering notice of such resignation to the Lenders and Borrower, effective on the date set forth in such notice. If Agent delivers any such notice, the Required Lenders shall have the right to appoint a successor Agent. If, after 30 days after the date of the retiring Agent's notice of resignation, no successor Agent has been appointed by the Required Lenders that has accepted such appointment, then the retiring Agent may, on behalf of the Lenders, appoint a successor Agent from among the Lenders, provided that, if Agent shall notify Borrower and the Lenders that no qualifying Person has accepted such appointment, then such resignation shall nonetheless become effective in accordance with such notice. Effective immediately upon its resignation, (a) the retiring Agent shall be discharged from its duties and obligations under the Loan Documents, (b) the Lenders shall assume and perform all of the duties of Agent until a successor Agent shall have accepted a valid appointment hereunder and all payments, communications and determinations provided to be made by, to or through Agent shall instead be made by or to each Lender directly until such time as the Required Lenders appoint a successor Agent as provided for above in this paragraph, (c) the retiring Agent and its Related Persons shall no longer have the benefit of any provision of any Loan Document other than with respect to any actions taken or omitted to be taken while such retiring Agent was, or because such Agent had been, validly acting as Agent under the Loan Documents, and (d) subject to its rights under Section 13.2(b), the retiring Agent shall take such action as may be reasonably necessary to assign to the successor Agent its rights as Agent under the Loan Documents. Effective immediately upon its acceptance of a valid appointment as Agent, a successor Agent shall succeed to, and become vested with, all of the rights, powers, privileges and duties of the retiring Agent under the Loan Documents.

13.8 Setoff and Sharing of Payments. In addition to any rights now or hereafter granted under any applicable requirement of law and not by way of limitation of any such rights, upon the occurrence and during the continuance of any Event of Default and subject to Section 13.9(d), each Lender is hereby authorized at any time or from time to time upon the direction of Agent, without notice to Borrower or any other Person, any such notice being hereby expressly waived, to setoff and to appropriate and to apply any and all balances held by it at any of its offices for the account of Borrower (regardless of whether such balances are then due to Borrower) and any other properties or assets at any time held or owing by that Lender or that holder to or for the credit or for the account of Borrower against and on account of any of the Obligations that are not paid when due. Any Lender exercising a right of setoff or otherwise receiving any payment on account of the Obligations in excess of its Pro Rata Share thereof shall purchase for cash (and the other Lenders or holders shall sell) such participations in each such other Lender's or holder's Pro Rata Share of the Obligations as would be necessary to cause such Lender to share the amount so offset or otherwise received with each other Lender or holder in accordance with their respective Pro Rata Shares of the Obligations. Borrower agrees, to the fullest extent permitted by law, that (a) any Lender may exercise its right to offset with respect to amounts in excess of its Pro Rata Share of the Obligations and may purchase participations in

accordance with the preceding sentence and (b) any Lender so purchasing a participation in the Credit Extensions made or other Obligations held by other Lenders or holders may exercise all rights of offset, bankers' lien, counterclaim or similar rights with respect to such participation as fully as if such Lender or holder were a direct holder of the Credit Extensions and the other Obligations in the amount of such participation. Notwithstanding the foregoing, if all or any portion of the offset amount or payment otherwise received is thereafter recovered from the Lender that has exercised the right of offset, the purchase of participations by that Lender shall be rescinded and the purchase price restored without interest.

13.9 Payments; Non-Funding Lenders; Actions in Concert.

(a) Payments. If Agent receives any payment for the account of any Lender on or prior to 2:00 p.m. (Eastern time) on any Business Day, Agent shall pay to the applicable Lender such payment on the next Business Day. If Agent receives any payment for the account of any Lender after 2:00 p.m. (Eastern time) on any Business Day, Agent shall pay to the applicable Lender such payment on the second Business Day thereafter.

(b) Return of Payments.

(i) If Agent pays an amount to a Lender under this Agreement in the belief or expectation that a related payment has been or will be received by Agent from Borrower and such related payment is not received by Agent, then Agent will be entitled to recover such amount (including interest accruing on such amount at the rate otherwise applicable to such Obligation) from such Lender on demand without setoff, counterclaim or deduction of any kind.

(ii) If Agent determines at any time that any amount received by Agent under any Loan Document must be returned to Borrower or paid to any other Person pursuant to any insolvency law or otherwise, then, notwithstanding any other term or condition of any Loan Document, Agent will not be required to distribute any portion thereof to any Lender. In addition, each Lender will repay to Agent on demand any portion of such amount that Agent has distributed to such Lender, together with interest at such rate, if any, as Agent is required to pay to Borrower or such other Person, without setoff, counterclaim or deduction of any kind.

(c) Non-Funding Lenders.

(i) Unless Agent shall have received notice from a Lender prior to the date of any particular Credit Extension that such Lender will not make available to Agent such Lender's Pro Rata Share of such Credit Extension, Agent may assume that such Lender will make such amount available to it on the date of such Credit Extension in accordance with Section 2.1(b)(i), and Agent may (but shall not be obligated to), in reliance upon such assumption, make available a corresponding amount for the account of Borrower on such date. If and to the extent that such Lender shall not have made such amount available to Agent, such Lender and Borrower severally agree to repay to Agent forthwith on demand such corresponding amount together with interest thereon, for each day from the day such amount is made available to Borrower until the day such amount is repaid to Agent, at a rate per annum equal to the

interest rate applicable to the Obligation that would have been created when Agent made available such amount to Borrower had such Lender made a corresponding payment available. If such Lender shall repay such corresponding amount to Agent, the amount so repaid shall constitute such Lender's portion of the applicable Credit Extension for purposes of this Agreement.

(ii) To the extent that any Lender has failed to fund any Credit Extension or any other payments required to be made by it under the Loan Documents after any such Credit Extension is required to be made or such payment is due (a "Non-Funding Lender"), Agent shall be entitled to set off the funding short-fall against that Non-Funding Lender's Pro Rata Share of all payments received from Borrower. The failure of any Non-Funding Lender to make any Credit Extension or any payment required by it hereunder shall not relieve any other Lender (each such other Lender, an "Other Lender") of its obligations to make such Credit Extension, but neither any Other Lender nor Agent shall be responsible for the failure of any Non-Funding Lender to make such Credit Extension or make any other payment required hereunder. Notwithstanding anything set forth herein to the contrary, a Non-Funding Lender shall not have any voting or consent rights under or with respect to any Loan Document or constitute a "Lender" (or be included in the calculation of the "Required Lenders" hereunder) for any voting or consent rights under or with respect to any Loan Document. At Borrower's request, Agent or a Person reasonably acceptable to Agent shall have the right with Agent's consent and in Agent's reasonable discretion (but Agent or any such Person shall have no obligation) to purchase from any Non-Funding Lender, and each Lender agrees that if it becomes a Non-Funding Lender it shall, at Agent's request, sell and assign to Agent or such Person, all of the Term Loan Commitment Amount (if any) and all of the outstanding Credit Extensions of that Non-Funding Lender for an amount equal to the principal balance of all Credit Extensions held by such Non-Funding Lender and all accrued interest with respect thereto through the date of sale, such purchase and sale to be consummated pursuant to an executed assignment agreement.

(d) Actions in Concert. Anything in this Agreement to the contrary notwithstanding, each Lender hereby agrees with each other Lender that no Lender shall take any action to protect or enforce its rights arising out of any Loan Document (including exercising any rights of setoff) without first obtaining the prior written consent of Agent and the Required Lenders, it being the intent of the Lenders that any such action by a Lender to protect or enforce rights under any Loan Document shall be taken in concert and at the direction or with the consent of Agent and the Required Lenders. Nothing contained herein shall be deemed to authorize Agent to authorize or consent to or accept or adopt on behalf of any Lender any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender to authorize the Agent to vote in respect of the claim of any Lender or in any such proceeding.

[Signature Page Follows]

[Signature Page to Loan and Security Agreement]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

BORROWER:

KALA PHARMACEUTICALS, INC.

By: /s/ Mary Reumuth

Name: Mary Reumuth

Title: Senior Director of Finance and Corporate Controller

AGENT:

SQUARE 1 BANK

By: /s/ David B. Kho

Name: David B. Kho

Title: Vice President

LENDERS:

SQUARE 1 BANK

By: /s/ David B. Kho

Name: David B. Kho

Title: Vice President

ALEXANDRIA EQUITIES, LLC,
a Delaware limited liability company

By: Alexandria Real Estate Equities, Inc., a Maryland corporation, managing member

By: /s/ Jennifer Banks

Name: Jennifer Banks

Title: EVP, General Counsel

SCHEDULE 1

LENDERS

Lender	Term Loan Commitment Amount	Closing Date Pro Rata Share	Address
Square 1 Bank	$ 7,000,000	70%	Square 1 Bank Attn: Loan Operations Manager 406 Blackwell Street, Suite 240 Durham, NC 27701 With a copy to: Square 1 Bank Attn: Phil Gager 101 Main Street, Suite 1210 Cambridge, MA 02142
Alexandria Equities, LLC	$ 3,000,000	30%	Alexandria Equities, LLC Attn: Corporate Secretary 385 E. Colorado Blvd., Suite 299 Pasadena, CA 91101 Fax: (626) 578-7252 With a copy to: investments@are.com

EXHIBIT A

DEFINITIONS

“Accounts” means all presently existing and hereafter arising accounts, contract rights, payment intangibles and all other forms of obligations owing to Borrower arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology) or the rendering of services by Borrower and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower and Borrower’s Books relating to any of the foregoing.

“Affiliate” means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by or is under common control with such Person, and each of such Person’s senior executive officers, directors, and general partners.

“Agent” has the meaning assigned in the preamble of this Agreement.

“Agreement” has the meaning assigned in the preamble of this Agreement.

“Authorized Officer” means someone designated as such in the corporate resolution provided by Borrower to Agent in which this Agreement and the transactions contemplated hereunder are authorized by Borrower’s board of directors. If Borrower provides subsequent corporate resolutions to Agent after the Closing Date, the individual(s) designated as “Authorized Officer(s)” in the most-recently provided resolution shall be the only “Authorized Officers” for purposes of this Agreement.

“Availability End Date” means the date that is 12 months from the Closing Date.

“Borrower” has the meaning assigned in the preamble of this Agreement.

“Borrower’s Books” means all of Borrower’s books and records including: ledgers; records concerning Borrower’s assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment containing such information.

“Business Day” means any day that is not a Saturday, Sunday, or other day on which banks in the State of North Carolina are authorized or required to close.

“Cash” means unrestricted cash and cash equivalents.

“Change in Control” means a transaction or series of transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than 49% of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions; provided that, in any event, the following shall not constitute a Change in Control for purposes of this Agreement: (a) an initial public offering of Borrower’s common stock (i) that is a QPO under Borrower’s Certificate of Incorporation, as the same may be amended from time to time, and (ii) in which Borrower receives aggregate gross proceeds of

not less than $30,000,000; or (b) a bona fide equity financing or series of financings on terms and from investors reasonably acceptable to Agent and the Required Lenders.

“Claims” has the meaning assigned in Section 12.2.

“Closing Date” means the date of this Agreement.

“Code” means the North Carolina Uniform Commercial Code as amended or supplemented from time to time.

"Collateral" means the property described on Exhibit B attached hereto and all Negotiable Collateral to the extent not described on Exhibit B, except to the extent any such property (a) is nonassignable by its terms without the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, § 25-9-406 and § 25-9-408 of the Code), (b) the granting of a security interest therein is contrary to applicable law, provided that, upon the cessation of any such restriction or prohibition, such property shall automatically become part of the Collateral, (c) constitutes the capital stock of a controlled foreign corporation (as defined in the IRC), in excess of 65% of the voting power of all classes of capital stock of such controlled foreign corporations entitled to vote, or (d) property (including any attachments, accessions or replacements) that is subject to a Lien that is permitted pursuant to clauses (a) and (c) of the definition of Permitted Liens, if the grant of a security interest with respect to such property pursuant to this Agreement would be prohibited by the agreement creating such Permitted Lien or would otherwise constitute a default thereunder, provided that such property will be deemed "Collateral" hereunder upon the termination and release of such Permitted Lien.

"Collateral State" means the state where the Collateral is located, which is Massachusetts.

"Compliance Certificate" means a compliance certificate, in substantially the form of Exhibit D attached hereto, executed by a Responsible Officer of Borrower.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (a) any indebtedness, lease, dividend, letter of credit or other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (b) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (c) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided,

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however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Copyrights" means any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held.

"Credit Extension" means each Term Loan or any other extension of credit by any Lender, to or for the benefit of Borrower hereunder.

"Equipment" means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which Borrower has any interest.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations thereunder.

"Event of Default" has the meaning assigned in Article 8.

"GAAP" means generally accepted accounting principles, consistently applied, as in effect from time to time in the United States.

"Indebtedness" means (a) all indebtedness for borrowed money or the deferred purchase price of property or services, including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations (as such term is understood under GAAP as in effect on the date hereof), and (d) all Contingent Obligations.

"Indemnified Person" has the meaning assigned in Section 12.2.

"Insolvency Proceeding" means any proceeding commenced by or against any Person or entity under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extension generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Intellectual Property" means:

(a) Copyrights, Trademarks and Patents;

(b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;

(c) Any and all design rights which may be available to Borrower now or hereafter existing, created, acquired or held;

(d) Any and all claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(e) All amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and

(f) All other intellectual property.

"Interest-Only End Date" means May 31, 2016.

"Inventory" means all present and future inventory in which Borrower has any interest.

"Investment" means any beneficial ownership of (including stock, partnership or limited liability company interest or other securities) any Person, or any loan, advance or capital contribution to any Person.

"Investment Agreement" means, collectively, Borrower's stock purchase and other agreement(s) pursuant to which Borrower most recently issued its preferred stock.

"IRC" means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

"Lender Expenses" means all reasonable costs or expenses (including reasonable attorneys' fees and expenses, whether generated in-house or by outside counsel) incurred in connection with the preparation, negotiation, administration, and enforcement of the Loan Documents; reasonable Collateral audit fees; and Agent's and the Lenders' reasonable attorneys' fees and expenses (whether generated in-house or by outside counsel) incurred in amending, enforcing or defending the Loan Documents (including fees and expenses of appeal), incurred before, during and after an Insolvency Proceeding, whether or not suit is brought.

"Lender Transfer" has the meaning assigned in Section 12.1.

"Lien" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"Loan Documents" means, collectively, this Agreement, any note or notes executed by Borrower, and any other document, instrument or agreement entered into in connection with this Agreement, all as amended or extended from time to time.

"Material Adverse Effect" means a material adverse effect on (a) the operations, business or financial condition of Borrower and its Subsidiaries taken as a whole, (b) the ability of Borrower to repay the Obligations or otherwise perform its obligations under the Loan Documents, or (c) Borrower's interest in, or the value, perfection or priority of Agent's security interest in the Collateral.

"Mucus Penetrating Delivery Technology" means microparticle and nanoparticle technologies for delivering pharmaceutical agents, including, without limitation, microparticles and

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nanoparticles for use in delivering therapeutic or prophylactic agents to or through mucus, mucin or mucosal barriers or tissues.

"Negotiable Collateral" means all of Borrower's present and future letters of credit of which it is a beneficiary, drafts, instruments (including promissory notes), securities, documents of title, and chattel paper, and Borrower's Books relating to any of the foregoing.

"New Subsidiary" has the meaning assigned in Section 6.8.

"Non-Funding Lender" has the meaning assigned in Section 13.9(c).

"Obligations" means all debt, principal, interest, Lender Expenses and other amounts owed to Agent or any Lender by Borrower pursuant to this Agreement or any other agreement, whether absolute or contingent, due or to become due, now existing or hereafter arising, including any interest that accrues after the commencement of an Insolvency Proceeding and including any debt, liability, or obligation owing from Borrower to others that Agent or any Lender may have obtained by assignment or otherwise. Notwithstanding the foregoing, "Obligations" shall not include any obligations under the Warrants (other than Lender Expenses incurred in connection therewith).

"Other Lender" has the meaning assigned in Section 13.9(c).

"Patents" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"Periodic Payments" means all installments or similar recurring payments that Borrower may now or hereafter become obligated to pay to any Lender pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrower and Agent and/or any Lender.

"Permitted Indebtedness" means:

(a) Indebtedness of Borrower in favor of the Lenders arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date and disclosed in the Schedule;

(c) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(d) Indebtedness not to exceed $250,000 in the aggregate at any time secured by a lien described in clause (c) of the defined term "Permitted Liens," provided that such Indebtedness does not exceed at the time it is incurred the lesser of the cost or fair market value of the property financed with such Indebtedness;

(e) Subordinated Debt;

(f) Indebtedness to trade creditors incurred in the ordinary course of business;

(g) Reimbursement obligations with respect to Square 1 letters of credit and credit cards;

(h) Indebtedness permitted under clause (d) of Permitted Investments; and

(i) Extensions, refinancings and renewals of any items of Permitted Indebtedness, provided that the principal amount is not increased or the terms modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"Permitted Investment" means:

(a) Investments existing on the Closing Date disclosed in the Schedule;

(b) (i) Marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof, (ii) commercial paper maturing no more than one year from the date of creation thereof and currently having rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Service, (iii) Square 1's certificates of deposit maturing no more than one year from the date of investment therein, (iv) Square 1's money market or other securities accounts, (v) Investments in regular deposit or checking accounts held with Square 1 or as otherwise permitted by, and subject to the terms and conditions of, Section 6.6 of this Agreement, and (vi) Investments consistent with any investment policy adopted by Borrower's board of directors;

(c) Investments accepted in connection with Permitted Transfers;

(d) Investments (i) of Subsidiaries in or to other Subsidiaries (which are co-Borrowers or secured guarantors and, for Subsidiaries created or acquired after the date hereof, with respect to which Borrower and its Subsidiaries have fully complied with Section 6.8 hereof) or Borrower and Investments by Borrower in Subsidiaries (which are co-Borrowers or secured guarantors and, for Subsidiaries created or acquired after the date hereof, with respect to which Borrower and its Subsidiaries have fully complied with Section 6.8 hereof) and (ii) of Subsidiaries in or to other Subsidiaries (which are not co-Borrowers or secured guarantors) and Investments by Borrower in Subsidiaries (which are not co-Borrowers or secured guarantors) not to exceed $100,000 in the aggregate in any fiscal year;

(e) Investments not to exceed $250,000 outstanding in the aggregate at any time consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plan agreements approved by Borrower's Board of Directors;

(f) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower's business;

(g) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business, provided that this subparagraph (h) shall not apply to Investments of Borrower in any Subsidiary;

(h) Joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the non-exclusive licensing of technology, the development of technology or the providing of technical support, provided that any cash Investments by Borrower in another Person do not exceed $100,000 in the aggregate in any fiscal year;

(i) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and

(j) Investments permitted under Section 7.3.

"Permitted Licenses" means the following:

(a) non-exclusive licenses or sublicenses and similar arrangements, partnerships and joint ventures on commercially reasonable terms for the use of the property of Borrower or its Subsidiaries in the ordinary course of business;

(b) exclusive licenses or sublicenses on commercially reasonable terms of Borrower's Mucus Penetrating Delivery Technology for any use (including the treatment of diseases and conditions of the eye) with a third-party proprietary therapeutic product candidate or group of third-party proprietary therapeutic product candidates or with a limited set of third-party proprietary drug targets targeting a specific disease or organ system, provided that any such license (i) does not include rights to any pre-clinical or clinical product candidate or drug target of Borrower (including without limitation where the active pharmaceutical ingredient is loteprednol etabonate or an RTKi developed by Borrower) and (ii) could not result in a legal transfer of title of the licensed property;

(c) exclusive licenses or sublicenses on commercially reasonable terms only as to discrete geographical areas outside of the United States, provided that any such license could not result in a legal transfer of title of the licensed property; and

(d) licenses or sublicenses existing on the Closing Date and disclosed on the Schedule;

provided, in each case, that, consistent with the terms of such license, Borrower's interest in such license would be included in the Collateral and Agent (for the benefit of the Lenders) would obtain a security interest therein.

"Permitted Liens" means the following:

(a) Any Liens existing on the Closing Date and disclosed in the Schedule (excluding Liens to be satisfied with the proceeds of the Credit Extensions) or arising under this Agreement, the other Loan Documents, or any other agreement in favor of Agent;

(b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings and for which Borrower maintains adequate reserves;

(c) Liens not to exceed $250,000 in the aggregate at any time (i) upon or in any Equipment (other than Equipment financed by a Credit Extension) acquired or held by Borrower or any of its Subsidiaries to secure the purchase price of such Equipment or indebtedness incurred solely for the purpose of financing the acquisition or lease of such Equipment, or (ii) existing on such Equipment at the time of its acquisition, in each case provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such Equipment;

(d) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (c) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase;

(e) Liens securing Subordinated Debt;

(f) Permitted Licenses;

(g) Liens securing reimbursement obligations regarding Square 1 letters of credit and credit cards;

(h) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed $25,000.00 and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(i) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA); and

(j) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 (attachment) or 8.7 (judgments).

"Permitted Transfer" means the conveyance, sale, lease, transfer or disposition by Borrower or any Subsidiary of:

(a) Inventory in the ordinary course of business;

(b) Transfers that constitute Permitted Investments;

(c) Transfers that constitute Permitted Licenses;

(d) worn-out, surplus or obsolete Equipment; and

(e) grants of security interests and other Liens that constitute Permitted Liens.

"Person" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"Prepayment Fee" has the meaning assigned in Section 2.4(c).

"Prime Rate" means the variable rate of interest, per annum, most recently announced by Square 1, as its "prime rate," whether or not such announced rate is the lowest rate available from Square 1.

"Pro Rata Share" means a fraction (expressed as a percentage, carried out to the ninth decimal place), the numerator of which is the original principal amount of a Lender's Credit Extensions to Borrower under this Agreement, and the denominator of which is the aggregate original principal amount of all Credit Extensions to Borrower under this Agreement, and, for clarity, as of the date hereof, means the percentage set forth on Schedule 1 hereto.

"Related Persons" means, with respect to any Person, each Affiliate of such Person and each director, officer, employee, agent, trustee, representative, attorney, accountant and each insurance, environmental, legal, financial and other advisor and other consultants and agents of or to such Person or any of its Affiliates.

"Representative" of Borrower, Agent or any Lender means, collectively, with respect to such party, its directors, officers, employees, agents or advisers (including, without limitation, attorneys, accountants, consultants, bankers and financial advisers).

"Required Lenders" means (a) for so long as all of the Persons that are Lenders on the Closing Date (each an "Original Lender") have not assigned or transferred any of their interests in their respective Credit Extensions, Lenders holding 100% of the aggregate outstanding principal balance of the Credit Extensions, or (b) at any time from and after any Original Lender has assigned or transferred any interest in its Credit Extensions, all Lenders meeting the criteria of at least one of the clauses below:

(i) each Original Lender that has not assigned or transferred any portion of its respective Credit Extensions,

(ii) each assignee of an Original Lender provided (A) such assignee was assigned or transferred and continues to hold 100% of the assigning Original Lender's interest in the Credit Extensions and (B) Agent has consented in writing to such assignee being a Required Lender by virtue of this clause (ii) of clause (b), except that no consent shall be required with respect to a Lender Transfer to the transferring Lender's Affiliate, another Lender or an Affiliate of another Lender, and

(iii) in the event that the Required Lenders under clauses (i) and (ii) of this clause (b) collectively hold less than 66-2/3% of the aggregate outstanding principal

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balance of the Credit Extensions, such other Lenders, when aggregated with the Required Lenders under clause (i) or (ii) of this clause (b), holding 66-2/3% or more of the aggregate outstanding principal balance of the Credit Extensions.

For purposes of this definition only, a Lender shall be deemed to include itself, and any Lender that is an Affiliate of such Lender.

"Responsible Officer" means each of the following, if applicable: the Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer, the Senior Director of Finance, the Interim President and Chief Business Officer and the Controller of Borrower, as well as any other officer or employee identified as an Authorized Officer in the corporate resolution delivered by Borrower to Agent in connection with this Agreement.

"Schedule" means the schedule of exceptions attached hereto and approved by Agent and the Lenders, if any.

"SOS Reports" means the official reports from the Secretaries of State of each Collateral State, the state where Borrower's chief executive office is located, the state of Borrower's formation and other applicable federal, state or local government offices identifying all current security interests filed in the Collateral and Liens of record as of the date of such report.

"Square 1" has the meaning assigned in the preamble of this Agreement.

"Subordinated Debt" means any debt incurred by Borrower that is subordinated in writing to the debt owing by Borrower to the Lenders on terms reasonably acceptable to Agent and the Required Lenders (and identified as being such by Borrower, Agent and the Required Lenders).

"Subsidiary" means any corporation, partnership or limited liability company or joint venture in which (a) any general partnership interest or (b) more than 50% of the stock, limited liability company interest or joint venture of which by the terms thereof ordinary voting power to elect the Board of Directors, managers or trustees of the entity, at the time as of which any determination is being made, is owned by Borrower, either directly or through an Affiliate.

"Term Loan Commitment Amount" means the dollar amount set forth on Schedule 1 hereto, as amended from time to time.

"Term Loan Maturity Date" means December 1, 2018.

"Trademarks" means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

"Transfer" has the meaning assigned in Section 7.1.

EXHIBIT B

COLLATERAL DESCRIPTION ATTACHMENT TO LOAN AND SECURITY AGREEMENT

DEBTOR **KALA PHARMACEUTICALS, INC.**

SECURED PARTY: **SQUARE 1 BANK, AS AGENT FOR THE LENDERS**

All personal property of Borrower (herein referred to as "Borrower" or "Debtor") whether presently existing or hereafter created or acquired, and wherever located, including, but not limited to:

(a) all accounts (including health-care-insurance receivables), chattel paper (including tangible and electronic chattel paper), deposit accounts, documents (including negotiable documents), equipment (including all accessions and additions thereto), financial assets, general intangibles, goods (including fixtures), instruments (including promissory notes), inventory (including all goods held for sale or lease or to be furnished under a contract of service, and including returns and repossessions), investment property (including securities and securities entitlements), letter of credit rights, money, and all of Debtor's books and records with respect to any of the foregoing, and the computers and equipment containing said books and records;

(b) any and all cash proceeds and/or noncash proceeds of any of the foregoing, including, without limitation, insurance proceeds, and all supporting obligations and the security therefor or for any right to payment. All terms above have the meanings given to them in the North Carolina Uniform Commercial Code, as amended or supplemented from time to time, including revised Division 9 of the Uniform Commercial Code-Secured Transactions.

Notwithstanding the foregoing, the Collateral shall not include any (i) property expressly excluded from Collateral under that certain Loan and Security Agreement dated as of November 20, 2014 by and among Square 1 Bank, as agent, the lenders party thereto, and Kala Pharmaceuticals, Inc. (the "Loan and Security Agreement") or (ii) Intellectual Property (as defined in the Loan and Security Agreement), in any medium, of any kind or nature whatsoever, now or hereafter owned or acquired or received by Borrower, or in which Borrower now holds or hereafter acquires or receives any right or interest (collectively, the "Intellectual Property"); provided, however, that the Collateral shall include all accounts and general intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the foregoing (the "Rights to Payment").

Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Intellectual Property is necessary to have a security interest in the Rights to Payment, then the Collateral shall automatically, and effective as of November 20, 2014, include the Intellectual Property to the extent and only to the extent necessary to permit perfection of Agent's security interest in the Rights to Payment, and further provided, however, that Agent's enforcement rights with respect to any security interest in the Intellectual Property shall be absolutely limited to the Rights to Payment only, and Agent shall have no recourse whatsoever with respect to the underlying Intellectual Property.

EXHIBIT C

LOAN ADVANCE / PAYDOWN REQUEST FORM

EXHIBIT D

COMPLIANCE CERTIFICATE

SCHEDULE OF EXCEPTIONS

Permitted Indebtedness (Exhibit A)

1. Irrevocable Standby Letter of Credit No. SVBSF008707, dated January 2, 2014 in the amount of $86,697.37 (Beneficiary: ARE-MA Region No. 9, LLC)

2. Borrower's credit cards with Silicon Valley Bank in an amount up to $35,000 in the aggregate.

Permitted Investments (Exhibit A) — None.

Permitted Licenses (Exhibit A)

1. Exclusive License Agreement between The Johns Hopkins University and Kala Pharmaceuticals, Inc. (formerly known as Hanes Newco, Inc.) dated November 10, 2009, as amended by a First Amendment dated November 19, 2012, as further amended by a Second Amendment dated May 22, 2014, and as again amended by a Third Amendment dated August 26, 2014.

2. Settlement and License Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

3. Side Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

Permitted Liens (Exhibit A)

1. That certain Irrevocable Standby Letter of Credit No. SVBSF008707, dated January 2, 2014 in the amount of $86,697.37 (Beneficiary: ARE-MA Region No. 9, LLC) disclosed above is secured by cash collateral in an amount equal to the dollar value of the letter of credit.

2. Bank Services Pledge Agreement (Cash-Secured), dated December 19, 2013, between Silicon Valley Bank and Kala Pharmaceuticals, Inc. with respect to deposit account no. relating to the letter of credit described in item 1 ("Pledge Agreement for Deposit Account No. ").

3. Borrower's credit cards with Silicon Valley Bank disclosed above are secured by cash collateral in an amount equal to $35,000 in the aggregate.

4. Bank Services Pledge Agreement (Cash-Secured), dated August 27, 2012, between Silicon Valley Bank and Kala Pharmaceuticals, Inc. with respect to deposit account no. relating to the credit cards described in item 3 ("Pledge Agreement for Deposit Account No. ").

Collateral (Section 5.3)

1. Certain property of Borrower is subject to Liens as described in items 1 and 2 of Schedule 7.5 and certain licenses and agreements to which Borrower is a party are subject to restrictions on transfer and/or pledge as described in Schedule 7.5.

Intellectual Property (Section 5.4)

1. Borrower's patent family identified as Kala reference number KP003 is jointly owned by Borrower and The John's Hopkins University. This patent family includes U.S. Provisional Patent Application Serial No. , filed May 3, 2012 (now expired), U.S. Patent Application Serial No.

, filed May 3, 2013, and PCT International Application No. , filed May 3, 2013, and any applications filed in the future claiming benefit of any of the foregoing.

2. Borrower is actively engaged in performing feasibility studies with a number of parties under the terms of feasibility study agreements ("FSA"), wherein Borrower is applying its platform technology to active pharmaceutical ingredients (API) provided by the other party to an FSA. In these arrangements, new inventions created in the course of that work (excluding inventions relating to the platform) are jointly owned by Borrower and the other party, and the parties cannot practice joint inventions without entering into a definitive license agreement.

3. The '433 Patent (as defined in Schedule 5.6) was revoked as described in Schedule 5.6.

Prior Names (Section 5.5)

1. Hanes Newco, Inc.

Litigation (Section 5.6)

1. On November 16, 2011, Vectura Limited ("Vectura") filed an opposition at the European Patent Office (the "Vectura Opposition") against European Patent No. 2061433 (the "'433 Patent") owned by The Johns Hopkins University and licensed to Kala Pharmaceuticals, Inc. Vectura sought to have all granted claims revoked. An Oral Hearing was held at the European Patent Office on April 23, 2013, at which the '433 Patent was revoked. A notice of appeal of the European Patent Office's decision was filed July 16, 2013, and the statement of grounds of appeal was submitted on September 17, 2013. Vectura filed its reply to appeal on February 7, 2014. The appeal is pending, and the Company is awaiting further communication or action by the European Patent Office.

Inbound Licenses; Other Agreements (Section 5.12)

1. Exclusive License Agreement between The Johns Hopkins University and Kala Pharmaceuticals, Inc. (formerly known as Hanes Newco, Inc.) dated November 10, 2009, as amended by a First Amendment dated November 19, 2012, as further amended by a Second Amendment dated May 22, 2014, and as again amended by a Third Amendment dated August 26, 2014.

2. Borrower is prohibited and/or restricted from granting a security interest in the licenses and agreements set forth in item 3 of Schedule 7.5.

Encumbrances (Section 7.5)

1. Deposit Account No. is subject to that certain Pledge Agreement described in item 2 of the Permitted Liens schedule.

2. Deposit Account No. is subject to that certain Pledge Agreement described in item 4 of the Permitted Liens schedule.

3. The following licenses and agreements contain restrictions on transfer and/or pledge:

    a. Exclusive License Agreement between The Johns Hopkins University and Kala Pharmaceuticals, Inc. (formerly known as Hanes Newco, Inc.) dated November 10, 2009, as amended by a First Amendment dated November 19, 2012, as further amended by a Second Amendment dated May 22, 2014, and as again amended by a Third Amendment dated August 26, 2014.

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    b. Settlement and License Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

    c. Side Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

    d. Lease Agreement, dated September 30, 2013, between ARE-MA Region No. 9, LLC and Kala Pharmaceuticals, Inc.

Locations (Section 7.10)

1. Michigan
2. California
3. New Jersey
4. Pennsylvania
5. New Hampshire

USA PATRIOT ACT
NOTICE
OF
CUSTOMER IDENTIFICATION

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT

To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account.

WHAT THIS MEANS FOR YOU: when you open an account, we will ask your name, address, date of birth, and other information that will allow us to identify you. We may also ask to see your driver's license or other identifying documents.

SQUARE 1 BANK

AUTOMATIC DEBIT AUTHORIZATION

Member FDIC

To: **Square 1 Bank, as agent for the Lenders**

Re: **Loan #**

You are hereby authorized and instructed to charge account No. in the name of KALA PHARMACEUTICALS, INC.

for facility fees, principal, interest and other payments due on above-referenced loan as set forth below and credit the loan referenced above.

x Debit the Facility Fee as it becomes due according to the terms of the Loan and Security Agreement and any renewals or amendments thereof.

x Debit each interest payment as it becomes due according to the terms of the Loan and Security Agreement and any renewals or amendments thereof.

x Debit each principal payment as it becomes due according to the terms of the Loan and Security Agreement and any renewals or amendments thereof.

x Debit each payment for Lender Expenses as it becomes due according to the terms of the Loan and Security Agreement and any renewals or amendments thereof.

This Authorization is to remain in full force and effect until revoked in writing.

Borrower Signature **Date**

CLIENT MARKETING AUTHORIZATION

We are excited to have you as a Square 1 Bank client and want to spread the word about your success!

From press releases to mentions on social media sites, and all points in between, Square 1's marketing and communications team is constantly seeking new opportunities to promote our clients and to connect them to prospects, existing customers, and the larger entrepreneurial/venture capital community.

If you complete the authorization below and return it to us, you are authorizing us to reference and/or include your company as part of our marketing and advertising efforts without further review or advance approval by you. Please select all areas that you approve.

o All items listed below

o List company as a Square 1 Bank customer on social media sites, including Twitter, LinkedIn, Facebook, Square 1 Bank corporate blog, or any other social media site

o Press release including your company as a Square 1 Bank client (to include company name and description only; may appear alongside other clients)

o Press release including your company as a Square 1 Bank client (**general** press release not focused on your company, but referring to your company as a client, and including your company's name, description, and editorial comments; may appear alongside other clients)

o Provide quote for inclusion in a Square 1 Bank press release

o Use of company name and logo in Square 1 Bank marketing materials including corporate marketing collateral, website, social media sites, and other advertising campaigns

o Provide quotes for inclusion in Square 1 Bank marketing materials including corporate marketing collateral, website, social media sites, and other advertising campaigns

o Customer case study/application brief (success story to be posted on website, included in press kits and/or pitched to publications as potential articles)

o Willing to participate in a video testimonial highlighting your banking relationship and experiences with Square 1 Bank

o Other (please describe):

If you have questions, please contact your Square 1 banker, or our Marketing + Communications department at marketing@square1bank.com.

Please acknowledge your authorization by signing below:

Company Name: **KALA PHARMACEUTICALS, INC.**
Authorized Signer: _____
Name: _____
Title: _____
Date: _____

FIRST AMENDMENT
TO
LOAN AND SECURITY AGREEMENT

This First Amendment to Loan and Security Agreement (the "***Amendment***") is entered into as of October 13, 2016, by and among Pacific Western Bank, a California state chartered bank (as successor in interest by merger to Square 1 Bank) ("***Square***"), in its capacity as administrative and collateral agent (together with its successors and assigns in such capacity, "***Agent***"), the Lenders set forth on Schedule 1 of the Agreement (as defined below) or otherwise a party thereto from time to time, including Square 1 in its capacity as a Lender and Alexandria Equities, LLC, a Delaware limited liability company (each individually a "***Lender***" and, collectively, the "***Lenders***"), and Kala Pharmaceuticals, Inc. ("***Borrower***").

RECITALS

Agent, the Lenders, and Borrower are parties to that certain Loan and Security Agreement dated as of November 20, 2014 (as amended from time to time, the "***Agreement***"). The parties desire to amend the Agreement in accordance with the terms of this Amendment.

NOW, THEREFORE, the parties agree as follows:

1) Section 2.1(b) of the Agreement is hereby amended and restated, as follows:

(b) Term Loans.

(i) Term Loans A. Subject to and upon the terms and conditions of this Agreement, the Lenders agree to make on the date hereof, severally and not jointly, according to each Lender's Term Loan Commitment Amount, term loans to Borrower in the aggregate principal amount of $10,000,000 (each a "Term Loan A" and, collectively, the "Term Loans A"). Each Term Loan A shall be deemed made as of October 13, 2016. The proceeds of the Term Loans A shall be used (A) first, to refinance the aggregate principal amount of all 'term loans' then outstanding under this Agreement (but without the requirement to pay any Prepayment Fee which is hereby waived) and (B) second, for general working capital purposes, for capital equipment purchases, to pay Lender Expenses and to pay the fees under this Agreement. For the avoidance of doubt, the difference between $10,000,000 and the outstanding balance of the existing term loans will be credited to Borrower's account, and no Prepayment Fee will be due in connection with the foregoing refinancing.

(ii) Term Loans B. Subject to and upon the terms and conditions of this Agreement, the Lenders agree to make, severally and not jointly, according to each Lender's Term Loan Commitment Amount, one or more term loans to Borrower in an aggregate principal amount not to exceed $10,000,000 (each a "Term Loan B" and, collectively, the "Term Loans B", and together with the Term Loans A, each a "Term Loan" and collectively, the "Term Loans"). Each Term Loan B shall be in a minimum amount of $250,000. Borrower may request Term Loans B at any time from the Term Loan B Availability Start Date through the

Term Loan B Availability End Date. The proceeds of the Term Loans B shall be used for general working capital purposes, for capital equipment purchases, to pay Lender Expenses and to pay the fees under this Agreement.

(iii) Interest shall accrue from the date of each Term Loan at the rate specified in Section 2.2(a) and, through the Interest-Only End Date, shall be payable monthly in arrears beginning on the 13th day of the month next following such Term Loan, and continuing on the same day of each month thereafter. Any Term Loans that are outstanding on the Interest-Only End Date shall be payable in 36 equal monthly installments of principal, plus all accrued interest, beginning on the date that is one month immediately following the Interest-Only End Date and continuing on the same day of each month thereafter through the Term Loan Maturity Date, at which time all amounts due in connection with the Term Loans and any other amounts due under this Agreement shall be immediately due and payable. Term Loans, once repaid, may not be reborrowed. Borrower may prepay any Term Loan, subject to the payment of the Prepayment Fee.

(iv) When Borrower desires to obtain a Term Loan B, Borrower shall notify Agent (which notice shall be irrevocable) by facsimile transmission to be received no later than 3:30 p.m. Eastern time at least five Business Days prior to the date on which the Term Loan B is to be made. Such notice shall be substantially in the form of Exhibit C and signed by an Authorized Officer. Promptly upon receiving such notice, Agent shall notify each Lender of the contents of such notice and each Lender's Pro Rata Share of such Term Loan B.

2) The table in Section 2.4(c) of the Agreement is hereby deleted and replaced with the following table:

Period	Applicable Prepayment Percentage
From October 13, 2016 to (but not including) October 13, 2017	0.90%
From October 13, 2017 to (but not including) October 13, 2018	0.60%
From October 13, 2018 and thereafter until the Term Loan Maturity Date	0.30%

3) Agent's address for notice in Article 10 of the Agreement is hereby amended to read as follows:

Pacific Western Bank
Attn: Loan Operations Manager
Durham, NC 27701
FAX: (919) 314-3080

4) The following defined terms are hereby added to Exhibit A to the Agreement, as follows:

"Term Loan B Availability End Date" means October 13, 2017.

"Term Loan B Availability Start Date" means the receipt by Agent and the Required Lenders of evidence reasonably acceptable to Agent and the Required Lenders that Borrower has received positive results from its second Phase III clinical trial for Borrower's KPI-121 product candidate for the treatment of inflammation and pain following cataract surgery. For purposes of clarity, 'positive' results shall mean (i) achievement of the primary endpoint of proportion of study eyes with complete resolution of anterior chamber cells at day 8 (maintained through day 15) sufficient to support NDA submission and (ii) no significant treatment-related safety findings observed during the course of the trial that would prevent submission of the NDA. An investor who has appointed a member to Borrower's Board of Directors, chosen by Agent and the Required Lenders, must confirm to Agent and the Required Lenders that the aforementioned 'positive' results are sufficient to support an NDA submission.

5) The following defined terms in Exhibit A to the Agreement are hereby amended and restated, as follows:

"Interest-Only End Date" means October 13, 2017.

"Pro Rata Share" means a fraction (expressed as a percentage, carried out to the ninth decimal place), the numerator of which is the original principal amount of a Lender's Credit Extensions to Borrower under this Agreement, and the denominator of which is the aggregate original principal amount of all Credit Extensions to Borrower under this Agreement, and, for clarity, means the percentage set forth on Schedule 1 hereto, as such schedule may be amended from time to time.

"Term Loan Maturity Date" means October 13, 2020.

6) Schedule 1 to the Agreement is hereby deleted and replaced with the new Schedule 1 attached hereto as Appendix I.

7) Item 2 of Section 5.4 of the Schedule of Exceptions to the Agreement is hereby deleted and replaced with the paragraph below:

2. From time to time, Borrower may engage in performing feasibility studies with a number of parties under the terms of feasibility study agreements ("FSA"), wherein Borrower would apply its platform technology to active pharmaceutical ingredients ("API") provided by the other party to such FSA. In such arrangements, new inventions created in the course of that work (excluding inventions relating to the platform) are typically jointly owned by Borrower and the other party, and the parties typically cannot practice joint inventions without entering into a definitive license agreement.

8) Section 5.12 of the Schedule of Exceptions to the Agreement is hereby amended to include the additional agreements listed below:

3. Settlement and License Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

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4. Side Agreement, dated October 24, 2014, by and between The Johns Hopkins University, Kala Pharmaceuticals, Inc., and GrayBug, LLC

9) The defined term "Availability End Date" and its definition in Exhibit A to the Agreement are hereby deleted.

10) Unless otherwise defined, all initially capitalized terms in this Amendment shall be as defined in the Agreement. The Agreement, as amended hereby, shall be and remain in full force and effect in accordance with its respective terms and hereby is ratified and confirmed in all respects. Except as expressly set forth herein, the execution, delivery, and performance of this Amendment shall not operate as a waiver of, or as an amendment of, any right, power, or remedy of the Lenders under the Agreement, as in effect prior to the date hereof. Borrower ratifies and reaffirms the continuing effectiveness of all agreements entered into in connection with the Agreement.

11) Borrower represents and warrants that the representations and warranties contained in the Agreement are true and correct in all material respects as of the date of this Amendment; provided, however, that those representations and warranties expressly referring to another date shall be true and correct as in all material respects as of such date; and provided further that representations and warranties that by their terms include a materiality qualification shall be true and correct in all respects.

12) This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

13) As a condition to the effectiveness of this Amendment, Agent shall have received, in form and substance satisfactory to Agent and each Lender, the following:

a) this Amendment, duly executed by Borrower;

b) an officer's certificate of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Amendment;

c) a Second Warrant to Purchase Stock issued to Square 1, duly executed by Borrower, in substantially the form attached hereto as Exhibit A;

d) a Second Warrant to Purchase Stock issued to Alexandria Equities, LLC, duly executed by Borrower, in substantially the form attached hereto as Exhibit B;

e) payment of a $20,000 facility fee (for the benefit of the Lenders), which Agent may debit from any of Borrower' s accounts at Square 1;

f) payment of all Lender Expenses, including Agent's and each Lender's expenses for the documentation of this Amendment and any related documents, and any UCC, good standing or intellectual property search or filing fees, which Agent may debit from any of Borrower's accounts at Square 1; and

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g) such other documents and completion of such other matters, as Agent and each Lender may reasonably deem necessary or appropriate.

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IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

BORROWER:

KALA PHARMACEUTICALS, INC.

By: /s/ Mary Reumuth
Name: Mary Reumuth
Title: VP Finance and Corporate Controller

AGENT:

PACIFIC WESTERN BANK

By: /s/ John Orlando
Name: John Orlando
Title: Vice President

LENDERS:

PACIFIC WESTERN BANK

By: /s/ John Orlando
Name: John Orlando
Title: Vice President

ALEXANDRIA EQUITIES, LLC
a Delaware limited liability company

By: Alexandria Real Estate Equities Inc., a Maryland corporation, managing member

By: /s/ Eric S. Johnson
Name: Senior Vice President
Title: RE Legal Affairs

[Signature Page to First Amendment to Loan and Security Agreement]

APPENDIX I

SCHEDULE 1

LENDERS

Lender	Term Loan A Commitment Amount	Term Loan B Commitment Amount	Pro Rata Share	Address
Pacific Western Bank	$ 7,000,000	$ 7,000,000	70%	Pacific Western Bank Attn: Loan Operations Manager 406 Blackwell Street, Suite 240 Durham, NC 27701 With a copy to: Pacific Western Bank 131 Oliver Street, 2nd Floor Boston, MA 02110 Attn: Phil Gager
Alexandria Equities, LLC	$ 3,000,000	$ 3,000,000	30%	Alexandria Equities, LLC Attn: Corporate Secretary 385 E. Colorado Blvd., Suite 299 Pasadena, CA 91101 Fax: (626) 578-7252 With a copy to: investments@are.com

Exhibit A

Form of Square 1 Second Warrant

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW. THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF THIS WARRANT.

SECOND WARRANT TO PURCHASE STOCK

Corporation:	Kala Pharmaceuticals, Inc.
Warrant No.:	No.
Number of Shares:	Calculated in accordance with Section 1.7
Class of Stock:	Series C Preferred Stock, par value $0.001 per share
Initial Exercise Price:	$1.5876 per share
Issue Date:	, 2016
Expiration Date:	, 2026
Credit Facility:	This Second Warrant to Purchase Stock (this "***Warrant***") is issued in connection with that certain Loan and Security Agreement among Pacific Western Bank, Alexandria Equities, LLC and the Company, dated November 20, 2014, as amended by the First Amendment to Loan and Security Agreement dated on or about the Issue Date, and as further amended from time to time (the "***Loan and Security Agreement***").

THIS SECOND WARRANT CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, **PACIFIC WESTERN BANK** or its assignee or transferee ("***Holder***") is entitled to purchase up to the aggregate number of fully paid and nonassessable shares of the class of securities (the "***Shares***") of the corporation (the "***Company***") at the initial exercise price per Share (the "***Warrant Price***") all as set forth above and as adjusted pursuant to Section 1.7 and Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. This is one of a series of the Company's warrants in the same form and issued on or about the Issue Date of this Warrant pursuant to the Loan and Security Agreement. Reference is made to Section 5.4 of this warrant, whereby Pacific Western Bank shall transfer this warrant to its parent company, PacWest Bancorp.

ARTICLE 1

EXERCISE

1.1 Method of Exercise. Holder may exercise this Warrant, in whole or in part, by delivering the original of this Warrant and a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising a cashless exercise set forth in Section 1.2, Holder shall also deliver to the Company a check, wire transfer of same-day funds (to an account designated by the Company) or other form of

payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. In lieu of payment of the aggregate Warrant Price in the manner specified in Section 1.1 above (but otherwise in accordance with the requirements of Section 1.1), Holder may elect to exercise this Warrant, in whole or in part, and receive such number of Shares as is determined by dividing (a) the aggregate fair market value of the Shares with respect to which this Warrant is being exercised (including the Shares surrendered to the Company in payment of the aggregate Warrant Price) minus the aggregate Warrant Price of the Shares with respect to which this Warrant is being exercised (including the Shares surrendered to the Company in payment of the aggregate Warrant Price) by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "***Trading Market***") and the Class of Stock is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day (as defined below) immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded or quoted on a Trading Market and the Class of Stock is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded or quoted on a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment. "***Business Day***" means any day that is not a Saturday, Sunday or a day on which Pacific Western Bank is closed.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate for the Shares acquired by Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares neither so acquired nor canceled in payment of the aggregate Warrant Price.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor.

1.6 Repurchase on Sale, Merger, or Consolidation of the Company.

1.6.1 ***Acquisition.*** For the purpose of this Warrant, "***Acquisition***" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or

other disposition of all or substantially all of the assets of the Company, (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); or (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power.

1.6.2 Exercise Upon Acquisition. Upon the closing of any Acquisition in which the consideration to be received by the Company's stockholders consists of cash, marketable securities, or a combination of both cash and marketable securities (a "***Cash/Public Acquisition***"), this Warrant shall be deemed to have been automatically exercised pursuant to Section 1.2, and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of the Company. For the purpose of this Warrant, "***marketable securities***" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

1.6.3 Assumption of Warrant. Upon the closing of any Acquisition other than a Cash/Public Acquisition, the successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

1.7 Adjustment in Underlying Shares.

1.7.1 Solely for purposes of this Section 1.7, capitalized terms used in this Section 1.7 but not defined in this Warrant shall have the meaning given to them in the Loan and Security Agreement.

1.7.2 This Warrant shall be exercisable for the number of Shares equal to the quotient of (a) 4.0% of the difference between (i) the aggregate principal amount of all Term Loans made by Pacific Western Bank pursuant to the Loan and Security Agreement on or before

the date of exercise, it being understood that in the event of any partial exercise of this Warrant, the aggregate principal amount of all Term Loans made by Pacific Western Bank upon any subsequent exercise shall include only the aggregate principal amount of Term Loans made after the date of the most recent prior exercise and (ii) $7,000,000, divided by (b) the Warrant Price, with any resulting fraction rounded down to the nearest whole share, which total number of Shares shall not exceed 176,366 (subject to any adjustment made pursuant to Article 2 hereof).

1.7.3 With respect to any adjustment to the number of shares pursuant to this Section 1.7, all shares subject to this Warrant shall be of the same series and class of stock and bearing the same rights, preferences, and privileges as such series and class of stock denoted in the above caption hereto. The adjustment under this Section 1.7 shall be in addition to any adjustment made pursuant to Article 2 hereof.

1.8 Certain Agreements. As a condition to the issuance of Shares upon any exercise of this Warrant, Holder shall, if the Company so requests in writing, become a party to, by execution and delivery to the Company of a counterpart signature page, joinder agreement, instrument of accession or similar instrument, (i) that certain Fifth Amended and Restated Stockholders Agreement, dated as of April 6, 2016, among the Company and the stockholders party thereto, as such agreement may be amended and/or restated from time to time (the "***Stockholders Agreement***"), and (ii) that certain Third Amended and Restated Registration Rights Agreement, dated as of April 6, 2016, among the Company and the individuals and entities listed on Exhibit A attached thereto, as such agreement may be amended and/or restated from time to time (the "***Registration Rights Agreement***") (each of which has been provided to Holder), in each case, solely with respect to the Shares issued upon such exercise (and the shares of common stock, if any, issued upon conversion of such Shares), solely to the extent that all holders of outstanding shares of the Class of Stock are then parties thereto, and solely to the extent each such agreement is then by its terms in force and effect.

ARTICLE 2

ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on the outstanding shares of the Class of Stock payable in common stock, or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the outstanding shares of the Class of Stock into a greater amount of shares of such Class of Stock, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the Company combines or consolidates, by reclassification or otherwise, the outstanding shares of the Class of Stock into a lesser amount of shares of such Class of Stock, the number of Shares purchasable hereunder shall be proportionately decreased and the Warrant Price shall be proportionately increased.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in all of the outstanding shares of the Class of Stock being reclassified, exchanged, substituted or replaced for, into with or by Company

securities of a different class and/or series, then from and after the consummation of such event, Holder shall be entitled to receive, upon exercise of this Warrant, the number and kind of securities that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock, automatically or by action of the holders thereof, pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation (as amended and/or restated from time to time, the "***Certificate of Incorporation***"), including, without limitation, in connection with a QPO (as defined in the Certificate of Incorporation). The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. Without duplication of any adjustment provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment from time to time in the manner set forth in the Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.4 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company at its expense shall promptly compute such adjustment, and notify Holder in writing setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer (or person of equivalent responsibility) setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

2.5 No Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (a) the fair market value (as determined pursuant to Section 1.3 above) of a full Share, less (b) the then-effective Warrant Price.

ARTICLE 3

REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class of Stock were last sold and issued prior to the Issue Date.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, when paid for in accordance with the provisions hereof, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

(c) The Company's capitalization table attached to this Warrant is true and complete, other than failures to be true and complete as are de minimis in effect to Holder, as of the Issue Date.

3.2 Notice of Certain Events. The Company shall provide Holder with not less than 10 days prior written notice of, including a description of the material facts surrounding, any of the following events: (a) declaration of any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) offering for subscription pro rata to the holders of the outstanding shares of the Class of Stock any

additional shares of stock of any class or series of its stock (other than pursuant to contractual pre-emptive rights); (c) effecting any reclassification or recapitalization of common stock; or (d) effecting an Acquisition or liquidation, dissolution or winding up. The Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

3.3 Information Rights. So long as Holder holds this Warrant, the Company shall deliver to Holder such reports as the Company furnishes to each Major Investor (as defined in the Stockholders Agreement) pursuant to Section 7.1 of the Stockholders Agreement, subject to the limitations set forth therein.

3.4 Registration Under Securities Act of 1933, as amended. The Company agrees that, upon execution and delivery of a counterpart signature to the Registration Rights Agreement, the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall be "Registrable Securities" solely for the purpose of obtaining "piggyback" registration rights pursuant to Section 4 of the Registration Rights Agreement, and Holder shall be an "Investor" under the Registration Rights Agreement.

ARTICLE 4

REPRESENTATIONS, WARRANTIES AND COVENANTS OF HOLDER

4.1 Representations and Warranties. Holder hereby represents and warrants to the Company as follows:

4.1.1 Purchase for Own Account. This Warrant is made with Holder in reliance upon the Holder's representation to the Company, which by Holder's execution of this Warrant, Holder hereby confirms, that this Warrant, the Shares and the securities issuable, directly or indirectly, upon conversion of the Shares, if any (collectively, the "Securities"), are being acquired for investment for Holder's own account (or the account of its respective Affiliates), not as a nominee or agent, and not with a view to the resale or distribution of any part

thereof in violation of any applicable law, and that Holder has no present intention of selling, granting any participation in or otherwise distributing the Securities to any other person in violation of any applicable law. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to such person or to any third person, with respect to any of the Securities.

4.1.2 Disclosure of Information. Holder represents that it has had an opportunity to discuss with the Company the terms and conditions of the offering of this Warrant and the Company's business, properties, prospects and financial condition. The foregoing, however, does not limit or modify the representations and warranties of the Company in Article 3 of this Warrant or the right of the Holder to rely thereon.

4.1.3 Investment Experience. Holder is an investor in securities of companies in the development stage and acknowledges that it is able to fend for itself, can bear the economic risk of its investment, and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in this Warrant and the Securities issuable upon exercise thereof. Holder also represents it has not been organized for the purpose of acquiring this Warrant or the Securities issuable upon exercise thereof.

4.1.4 No Public Market. Holder understands that no public market now exists for this Warrant or the Securities issuable upon exercise thereof, and that the Company has made no assurances that a public market will ever exist for this Warrant or the Shares.

4.1.5 Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act.

4.1.6 Restricted Securities. Holder understands that the Securities are "restricted securities" under applicable U.S. federal and state securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such Securities may be resold without registration under the Securities Act and such other securities laws only in certain limited circumstances. In the absence of any effective registration statement covering the Securities or an available exemption from registration under the Securities Act, the Securities must be held indefinitely. In this connection, such Holder represents that it is familiar with Rule 144 of the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act, including without limitation the Rule 144 condition that current information about the Company be available to the public. Such information is not now available and the Company has no present plans to make such information available. Holder acknowledges that the Company has no obligation to register or qualify the Securities for resale.

4.2 Market Stand-Off Agreement. Holder agrees that the Shares shall be subject to the same market stand-off provisions as those set forth in Section 12 of the Registration Rights Agreement, as in effect on the Issue Date.

4.3 No Stockholder Rights. Without limiting any provision of this Warrant, Holder agrees that, as a Holder of this Warrant, it will not have any voting rights or other rights as a stockholder until the exercise of this Warrant in accordance with its terms.

ARTICLE 5

MISCELLANEOUS

5.1 Term; Automatic Cashless Exercise Upon Expiration.

5.1.1 This Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above; provided, however, that if the Company completes its initial public offering within the 270-day period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until 270 days after the effective date of the Company's initial public offering.

5.1.2 In the event that, upon the Expiration Date, the fair market value (as determined pursuant to Section 1.3 above) of one Share (or other security issuable upon the exercise hereof) is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised.

5.2 Legends. Each certificate evidencing the Shares (and each certificate evidencing the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

> THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN SECOND WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO PACIFIC WESTERN BANK DATED , 2016, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to PacWest Bancorp or any other affiliate of Holder or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. After receipt by Pacific Western Bank of this warrant, Pacific Western Bank will transfer this warrant in its entirety to its parent company, PacWest

Bancorp. Subject to the provisions of Section 5.3 and this Section 5.4, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) by giving the Company written notice of the portion of this Warrant and/or Shares (and/or securities issuable, directly or indirectly, upon conversion of the Shares, if any) being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to the Company for reissuance to the transferee(s) (and Holder, if applicable); provided that, as a condition to such transfer, any subsequent transferee shall agree in writing with the Company to be bound by the terms and conditions of this Warrant, including without limitation Section 4.2 hereof. No surrender or reissuance shall be required for the transfer to PacWest Bancorp or a transfer to any other affiliate of Holder; provided that, for a transfer to any other affiliate of Holder, Holder gives the Company written notice of the portion of this Warrant and/or Shares (and/or securities issuable, directly or indirectly, upon conversion of the Shares, if any) being transferred setting forth the name, address and taxpayer identification number of the transferee. Notwithstanding anything to the contrary set forth herein, Holder shall not be permitted to transfer this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) to an operating corporation, partnership, limited liability company or similar entity actively engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the research, production, development, manufacture, licensing, distribution, sale, or use of microparticle or nanoparticle technologies for developing therapeutic or prophylactic pharmaceutical agents delivered to or through mucus, mucin, or mucosal tissues or barriers (a "***Competitive Operating Entity***"), except in connection with an Acquisition of the Company by such Competitive Operating Entity.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first- class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to Holder shall be addressed as follows:

PacWest Bancorp
Attn: Warrant Administrator
406 Blackwell Street, Suite 240
Durham, NC 27701

All notices to the Company shall be addressed as follows until Holder receives notice of a change in address:

Kala Pharmaceuticals, Inc.
100 Beaver Street
Suite 201
Waltham, MA 02453
Attn: Chief Executive Officer

With a copy (which shall not constitute notice) to:

Wilmer Cutler Pickering Hale and Dorr LLP
Attn: Lia Der Marderosian, Esq.
60 State Street
Boston, MA 02109
Facsimile: (617) 526 5000
Email: Lia.DerMarderosian@wilmerhale.com

5.6 Amendments. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principles regarding conflicts of law.

5.9 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

5.10 Effect of Headings. The descriptive headings in this Warrant have been inserted for convenience only and shall not be deemed to limit or otherwise affect the construction of any provision hereof.

5.11 Entire Agreement. This Warrant constitutes the full and entire understanding and agreement among the parties hereto with respect to the subject matter hereof, and any and all other written or oral agreements relating to such subject matter existing among the parties are expressly canceled.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this Second Warrant to Purchase Stock as of the Issue Date set forth above.

COMPANY:

KALA PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

HOLDER:

PACIFIC WESTERN BANK

By: _____

Name: _____

Title: _____

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned, pursuant to the terms of the attached warrant (the "Warrant"), hereby elects to purchase: *(check applicable box)*

o Shares of **KALA PHARMACEUTICALS, INC.** covered by the Warrant and tenders herewith payment of the purchase price of such Shares in full pursuant to Section 1.1 thereof; or

o Shares of **KALA PHARMACEUTICALS, INC.** covered by the Warrant pursuant to the cashless exercise procedure set forth in Section 1.2 thereof.

2. Please issue a certificate or certificates representing the Shares in the name of the undersigned or in such other name as is specified below:

Holder's Name:
Address:

3. By its execution below, Holder hereby makes and affirms each of the representations, warranties and covenants set forth in Section 4 of the Warrant as of the date hereof.

HOLDER:

PACIFIC WESTERN BANK

By: _____

_____
(Print Name of Signatory)

_____
(Title)

_____
(Date)

Exhibit B

Form of Alexandria Equities, LLC Second Warrant

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW. THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF THIS WARRANT.

SECOND WARRANT TO PURCHASE STOCK

Corporation:	Kala Pharmaceuticals, Inc.
Warrant No.:	No.
Number of Shares:	Calculated in accordance with Section 1.7
Class of Stock:	Series C Preferred Stock, par value $0.001 per share
Initial Exercise Price:	$1.5876 per share
Issue Date:	, 2016
Expiration Date:	, 2026
Credit Facility:	This Second Warrant to Purchase Stock (this "***Warrant***") is issued in connection with that certain Loan and Security Agreement among Pacific Western Bank, Alexandria Equities, LLC and the Company, dated November 20, 2014, as amended by the First Amendment to Loan and Security Agreement dated on or about the Issue Date, and as further amended from time to time (the "***Loan and Security Agreement***").

THIS SECOND WARRANT CERTIFIES THAT, for good and valuable consideration, the receipt of which is hereby acknowledged, **ALEXANDRIA EQUITIES, LLC** or its assignee or transferee ("***Holder***") is entitled to purchase up to the aggregate number of fully paid and nonassessable shares of the class of securities (the "***Shares***") of the corporation (the "***Company***") at the initial exercise price per Share (the "***Warrant Price***") all as set forth above and as adjusted pursuant to Section 1.7 and Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. This is one of a series of the Company's warrants in the same form and issued on or about the Issue Date of this Warrant pursuant to the Loan and Security Agreement.

ARTICLE 1

EXERCISE

1.1 Method of Exercise. Holder may exercise this Warrant, in whole or in part, by delivering the original of this Warrant and a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising a cashless exercise set forth in Section 1.2, Holder shall also deliver to the Company a check, wire transfer of same-day funds (to an account designated by the Company) or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 Cashless Exercise. In lieu of payment of the aggregate Warrant Price in the manner specified in Section 1.1 above (but otherwise in accordance with the requirements of Section 1.1), Holder may elect to exercise this Warrant, in whole or in part, and receive such number of Shares as is determined by dividing (a) the aggregate fair market value of the Shares with respect to which this Warrant is being exercised (including the Shares surrendered to the Company in payment of the aggregate Warrant Price) minus the aggregate Warrant Price of the Shares with respect to which this Warrant is being exercised (including the Shares surrendered to the Company in payment of the aggregate Warrant Price) by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "***Trading Market***") and the Class of Stock is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business Day (as defined below) immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded or quoted on a Trading Market and the Class of Stock is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded or quoted on a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment. "***Business Day***" means any day that is not a Saturday, Sunday or a day on which Pacific Western Bank is closed.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate for the Shares acquired by Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares neither so acquired nor canceled in payment of the aggregate Warrant Price.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at its expense shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor.

1.6 Repurchase on Sale, Merger, or Consolidation of the Company.

1.6.1 ***Acquisition.*** For the purpose of this Warrant, "***Acquisition***" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company, (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate

reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization (or, if such Company stockholders beneficially own a majority of the outstanding voting power of the surviving or successor entity immediately after such merger, consolidation or reorganization, such surviving or successor entity is not the Company); or (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power.

1.6.2 Exercise Upon Acquisition. Upon the closing of any Acquisition in which the consideration to be received by the Company's stockholders consists of cash, marketable securities, or a combination of both cash and marketable securities (a "***Cash/Public Acquisition***"), this Warrant shall be deemed to have been automatically exercised pursuant to Section 1.2, and thereafter Holder shall participate in the Acquisition on the same terms as other holders of the same class of securities of the Company. For the purpose of this Warrant, "***marketable securities***" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in a Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly re-selling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

1.6.3 Assumption of Warrant. Upon the closing of any Acquisition other than a Cash/Public Acquisition, the successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

1.7 Adjustment in Underlying Shares.

1.7.1 Solely for purposes of this Section 1.7, capitalized terms used in this Section 1.7 but not defined in this Warrant shall have the meaning given to them in the Loan and Security Agreement.

1.7.2 This Warrant shall be exercisable for the number of Shares equal to the quotient of (a) 4.0% of the difference between (i) the aggregate principal amount of all Term Loans made by Alexandria Equities, LLC pursuant to the Loan and Security Agreement on or before the date of exercise, it being understood that in the event of any partial exercise of this Warrant, the aggregate principal amount of all Term Loans made by Alexandria Equities, LLC upon any subsequent exercise shall include only the aggregate principal amount of Term Loans

made after the date of the most recent prior exercise and (ii) $3,000,000, divided by (b) the Warrant Price, with any resulting fraction rounded down to the nearest whole share, which total number of Shares shall not exceed 75,585 (subject to any adjustment made pursuant to Article 2 hereof).

1.7.3 With respect to any adjustment to the number of shares pursuant to this Section 1.7, all shares subject to this Warrant shall be of the same series and class of stock and bearing the same rights, preferences, and privileges as such series and class of stock denoted in the above caption hereto. The adjustment under this Section 1.7 shall be in addition to any adjustment made pursuant to Article 2 hereof.

1.8 Certain Agreements. As a condition to the issuance of Shares upon any exercise of this Warrant, Holder shall, if the Company so requests in writing, become a party to, by execution and delivery to the Company of a counterpart signature page, joinder agreement, instrument of accession or similar instrument, (i) that certain Fifth Amended and Restated Stockholders Agreement, dated as of April 6, 2016, among the Company and the stockholders party thereto, as such agreement may be amended and/or restated from time to time (the "***Stockholders Agreement***"), and (ii) that certain Third Amended and Restated Registration Rights Agreement, dated as of April 6, 2016, among the Company and the individuals and entities listed on Exhibit A attached thereto, as such agreement may be amended and/or restated from time to time (the "***Registration Rights Agreement***") (each of which has been provided to Holder), in each case, solely with respect to the Shares issued upon such exercise (and the shares of common stock, if any, issued upon conversion of such Shares), solely to the extent that all holders of outstanding shares of the Class of Stock are then parties thereto, and solely to the extent each such agreement is then by its terms in force and effect.

ARTICLE 2

ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on the outstanding shares of the Class of Stock payable in common stock, or other securities, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend occurred. If the Company subdivides the outstanding shares of the Class of Stock into a greater amount of shares of such Class of Stock, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the Company combines or consolidates, by reclassification or otherwise, the outstanding shares of the Class of Stock into a lesser amount of shares of such Class of Stock, the number of Shares purchasable hereunder shall be proportionately decreased and the Warrant Price shall be proportionately increased.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in all of the outstanding shares of the Class of Stock being reclassified, exchanged, substituted or replaced for, into with or by Company securities of a different class and/or series, then from and after the consummation of such event, Holder shall be entitled to receive, upon exercise of this Warrant, the number and kind of

securities that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock, automatically or by action of the holders thereof, pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation (as amended

and/or restated from time to time, the "***Certificate of Incorporation***"), including, without limitation, in connection with a QPO (as defined in the Certificate of Incorporation). The Company or its successor shall promptly issue to Holder a new warrant for such new securities or other property. The new warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. Without duplication of any adjustment provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment from time to time in the manner set forth in the Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.4 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company at its expense shall promptly compute such adjustment, and notify Holder in writing setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer (or person of equivalent responsibility) setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

2.5 No Fractional Shares. No fractional Shares shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise of this Warrant, the Company shall eliminate such fractional share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (a) the fair market value (as determined pursuant to Section 1.3 above) of a full Share, less (b) the then-effective Warrant Price.

ARTICLE 3

REPRESENTATIONS AND COVENANTS OF THE COMPANY

3.1 Representations and Warranties. The Company hereby represents and warrants to Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class of Stock were last sold and issued prior to the Issue Date.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, when paid for in accordance with the provisions hereof, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

(c) The Company's capitalization table attached to this Warrant is true and complete, other than failures to be true and complete as are de minimis in effect to Holder, as of the Issue Date.

3.2 Notice of Certain Events. The Company shall provide Holder with not less than 10 days prior written notice of, including a description of the material facts surrounding, any of the following events: (a) declaration of any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) offering for subscription pro rata to the holders of the outstanding shares of the Class of Stock any additional shares of stock of any class or series of its stock (other than pursuant to contractual pre-emptive rights); (c) effecting any reclassification or recapitalization of common stock; or (d) effecting an Acquisition or liquidation, dissolution or winding up. The Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements.

3.3 Information Rights. So long as Holder holds this Warrant, the Company shall deliver to Holder such reports as the Company furnishes to each Major Investor (as defined in the Stockholders Agreement) pursuant to Section 7.1 of the Stockholders Agreement, subject to the limitations set forth therein.

3.4 Registration Under Securities Act of 1933, as amended. The Company agrees that, upon execution and delivery of a counterpart signature to the Registration Rights Agreement, the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall be "Registrable Securities" solely for the purpose of obtaining "piggyback" registration rights pursuant to Section 4 of the Registration Rights Agreement, and Holder shall be an "Investor" under the Registration Rights Agreement.

ARTICLE 4

REPRESENTATIONS, WARRANTIES AND COVENANTS OF HOLDER

4.1 Representations and Warranties. Holder hereby represents and warrants to the Company as follows:

4.1.1 Purchase for Own Account. This Warrant is made with Holder in reliance upon the Holder's representation to the Company, which by Holder's execution of this Warrant, Holder hereby confirms, that this Warrant, the Shares and the securities issuable, directly or indirectly, upon conversion of the Shares, if any (collectively, the "Securities"), are being acquired for investment for Holder's own account (or the account of its respective Affiliates), not as a nominee or agent, and not with a view to the resale or distribution of any part

thereof in violation of any applicable law, and that Holder has no present intention of selling, granting any participation in or otherwise distributing the Securities to any other person in violation of any applicable law. By executing this Warrant, Holder further represents that Holder does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participation to such person or to any third person, with respect to any of the Securities.

4.1.2 Disclosure of Information. Holder represents that it has had an opportunity to discuss with the Company the terms and conditions of the offering of this Warrant and the Company's business, properties, prospects and financial condition. The foregoing, however, does not limit or modify the representations and warranties of the Company in Article 3 of this Warrant or the right of the Holder to rely thereon.

4.1.3 Investment Experience. Holder is an investor in securities of companies in the development stage and acknowledges that it is able to fend for itself, can bear the economic risk of its investment, and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in this Warrant and the Securities issuable upon exercise thereof. Holder also represents it has not been organized for the purpose of acquiring this Warrant or the Securities issuable upon exercise thereof.

4.1.4 No Public Market. Holder understands that no public market now exists for this Warrant or the Securities issuable upon exercise thereof, and that the Company has made no assurances that a public market will ever exist for this Warrant or the Shares.

4.1.5 Accredited Investor. Holder is an "accredited investor" within the meaning of Rule 501(a) of Regulation D promulgated under the Securities Act.

4.1.6 Restricted Securities. Holder understands that the Securities are "restricted securities" under applicable U.S. federal and state securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such Securities may be resold without registration under the Securities Act and such other securities laws only in certain limited circumstances. In the absence of any effective registration statement covering the Securities or an available exemption from registration under the Securities Act, the Securities must be held indefinitely. In this connection, such Holder represents that it is familiar with Rule 144 of the Securities Act, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act, including without limitation the Rule 144 condition that current information about the Company be available to the public. Such information is not now available and the Company has no present plans to make such information available. Holder acknowledges that the Company has no obligation to register or qualify the Securities for resale.

4.2 Market Stand-Off Agreement. Holder agrees that the Shares shall be subject to the same market stand-off provisions as those set forth in Section 12 of the Registration Rights Agreement, as in effect on the Issue Date.

4.3 No Stockholder Rights. Without limiting any provision of this Warrant, Holder agrees that, as a Holder of this Warrant, it will not have any voting rights or other rights as a stockholder until the exercise of this Warrant in accordance with its terms.

ARTICLE 5

MISCELLANEOUS

5.1 Term; Automatic Cashless Exercise Upon Expiration.

5.1.1 This Warrant is exercisable in whole or in part, at any time and from time to time on or before the Expiration Date set forth above; provided, however, that if the Company completes its initial public offering within the 270-day period immediately prior to the Expiration Date, the Expiration Date shall automatically be extended until 270 days after the effective date of the Company's initial public offering.

5.1.2 In the event that, upon the Expiration Date, the fair market value (as determined pursuant to Section 1.3 above) of one Share (or other security issuable upon the exercise hereof) is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised.

5.2 Legends. Each certificate evidencing the Shares (and each certificate evidencing the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

> THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN SECOND WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO ALEXANDRIA EQUITIES, LLC DATED , 2016, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH APPLICABLE LAW.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3 and this Section 5.4, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this

Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) by giving the Company written notice of the portion of this Warrant and/or Shares (and/or securities issuable, directly or indirectly, upon conversion of the Shares, if any) being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to the Company for reissuance to the transferee(s) (and Holder, if applicable); provided that, as a condition to such transfer, any subsequent transferee shall agree in writing with the Company to be bound by the terms and conditions of this Warrant, including without limitation Section 4.2 hereof. No surrender or reissuance shall be required if the transfer is to an affiliate of Holder; provided that Holder gives the Company written notice of the portion of this Warrant and/or Shares (and/or securities issuable, directly or indirectly, upon conversion of the Shares, if any) being transferred setting forth the name, address and taxpayer identification number of the transferee. Notwithstanding anything to the contrary set forth herein, Holder shall not be permitted to transfer this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) to an operating corporation, partnership, limited liability company or similar entity actively engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the research, production, development, manufacture, licensing, distribution, sale, or use of microparticle or nanoparticle technologies for developing therapeutic or prophylactic pharmaceutical agents

delivered to or through mucus, mucin, or mucosal tissues or barriers (a "***Competitive Operating Entity***"), except in connection with an Acquisition of the Company by such Competitive Operating Entity.

5.5 Notices. All notices and other communications from the Company to Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first- class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time. All notices to Holder shall be addressed as follows:

Alexandria Equities, LLC
385 E. Colorado Blvd., Suite 299
Pasadena, California 91101
Attn: Chief Financial Officer

All notices to the Company shall be addressed as follows until Holder receives notice of a change in address:

Kala Pharmaceuticals, Inc.
100 Beaver Street
Suite 201
Waltham, MA 02453
Attn: Chief Executive Officer

With a copy (which shall not constitute notice) to:

Wilmer Cutler Pickering Hale and Dorr LLP
Attn: Lia Der Marderosian, Esq.
60 State Street
Boston, MA 02109
Facsimile: (617) 526 5000
Email: Lia.DerMarderosian@wilmerhale.com

5.6 Amendments. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to its principles regarding conflicts of law.

5.9 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

5.10 Effect of Headings. The descriptive headings in this Warrant have been inserted for convenience only and shall not be deemed to limit or otherwise affect the construction of any provision hereof.

5.11 Entire Agreement. This Warrant constitutes the full and entire understanding and agreement among the parties hereto with respect to the subject matter hereof, and any and all other written or oral agreements relating to such subject matter existing among the parties are expressly canceled.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this Second Warrant to Purchase Stock as of the Issue Date set forth above.

COMPANY:

KALA PHARMACEUTICALS, INC.

By: _____

Name: _____

Title: _____

HOLDER:

ALEXANDRIA EQUITIES, LLC

By: _____

Name: _____

Title: _____

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned, pursuant to the terms of the attached warrant (the "Warrant"), hereby elects to purchase: *(check applicable box)*

o Shares of **KALA PHARMACEUTICALS, INC.** covered by the Warrant and tenders herewith payment of the purchase price of such Shares in full pursuant to Section 1.1 thereof; or

o Shares of **KALA PHARMACEUTICALS, INC.** covered by the Warrant pursuant to the cashless exercise procedure set forth in Section 1.2 thereof.

2. Please issue a certificate or certificates representing the Shares in the name of the undersigned or in such other name as is specified below:

Holder's Name:
Address:

3. By its execution below, Holder hereby makes and affirms each of the representations, warranties and covenants set forth in Section 4 of the Warrant as of the date hereof.

HOLDER:

ALEXANDRIA EQUITIES, LLC

By: _____

_____
(Print Name of Signatory)

_____
(Title)

_____
(Date)

September 10, 2015

Mark Iwicki
c/o Kala Pharmaceuticals, Inc.
100 Beaver Street, Suite 201
Waltham, MA 02453

Dear Mark:

This letter agreement amends and restates in its entirety the letter agreement dated April 6, 2015, provided to you by Kala Pharmaceuticals, Inc., a Delaware corporation (the "Company") in connection with your commencement of employment with the Company (the "Prior Letter Agreement").

1. Position. Effective as of the date hereof (the "Effective Date"), you will be employed to serve on a full-time basis as the Company's Chief Executive Officer. You will also serve as the Chairman of the Company's Board of Directors (the "Board") and continue to be a member of the Board. As the Company's Chief Executive Officer and Chairman you will perform the duties and responsibilities and have the authority that are consistent with such positions at similarly situated companies; and such other duties and responsibilities as may be reasonably assigned to you by the Board. You will report to the Board and all other employees will report to the Board through you. You will be expected to devote your full professional efforts to the performance of your duties and responsibilities for the Company and to materially abide by all Company policies and procedures as in effect from time to time. Moreover, during your employment with the Company, you will be expected to conduct your business activities at all times in accordance with the highest legal, ethical and professional standards. The Company expects that you will perform your services as Chief Executive Officer and Chairman primarily from the Company's headquarters, which are currently located in Waltham, Massachusetts.

2. Base Salary. Effective as of the Effective Date, you shall be paid on a bi-weekly basis at an annual base rate of $455,000.00, subject to tax and other withholdings as required by law, to be paid in accordance with the Company's standard payroll practices. Your base salary will be reviewed annually by the Compensation Committee of the Board for potential increase (but not decrease).

3. Cash Bonus. You will be eligible to earn an annual performance-based cash bonus with a target of 40% of your annual base salary. Payment of this performance-based

bonus shall be based on written Company and personal objectives and criteria established by the Board. The level of achievement of the Company and personal objectives and criteria and the amount of the performance-based bonus, if any, will be determined by the Board in its discretion, will be paid annually after the first of the year (but in no event later than March 15), subject to you being employed with the Company on the preceding December 3lst, except as otherwise provided in the provisions herein related to termination of service.

4. Benefits.

(a) You may participate in any and all benefit programs that the Company establishes and makes available to its similarly situated employees from time to time, provided you are eligible under (and subject to all provisions of) the plan documents governing those programs. For the avoidance of doubt, you will be eligible to participate in the Company's medical benefit plans. The benefit programs made available by the Company, and the rules, terms and conditions for participation in such programs, may be changed by the Company at any time without advance notice.

(b) Expenses. You will be reimbursed for your actual, necessary and reasonable business expenses pursuant to Company policy, subject to the provisions of Exhibit A, Section 3. You will be promptly reimbursed for the reasonable legal fees incurred by you in connection with this agreement up to a maximum of $5,000.

5. Vacation. You are eligible for a maximum of four weeks of vacation per calendar year commencing on the Effective Date. The number of vacation days for which you are eligible shall accrue at the rate of 1.67 days per month that you are employed during such calendar year. Any unused vacation will be paid upon termination of your employment in accordance with the Company's annual vacation accrual policy.

6. Equity Compensation.

(a) In connection with your commencement of employment with the Company you were granted an option under the Company's 2009 Employee, Director and Consultant Equity Incentive Plan, as amended (the "2009 Plan"), to purchase 1,419,243 shares of the Company's common stock, with an exercise price of $0.42 per share (the "Initial Option") in accordance with the terms of the Prior Letter Agreement. One hundred percent (100%) of the shares subject to the Initial Option vest monthly over forty-eight (48) months, in equal monthly amounts, beginning on May 8, 2015, subject to your continued employment with the Company, service on the Board or otherwise providing service to the Company on each such vesting date, except as otherwise provided in (f) and (g) below; provided that, if you are an employee, member of the Board or are otherwise providing services to the Company at the time of a Change of Control or are terminated without Cause (as defined below) or terminate for Good Reason (as defined below) in Contemplation of a Change in Control (as defined below), the Initial Option shall vest in full upon consummation of such Change of Control. The Initial Option is an incentive stock option to the maximum extent permitted by law, and is subject to the terms and conditions of the 2009 Plan and the option grant agreement, including vesting requirements. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant

confer any right to continue vesting or employment or other service with the Company. "Contemplation of a Change in Control" means a termination without Cause or for Good Reason that is in connection with and reasonably related to, and occurs within 120 days prior to, a Change in Control.

(b) In addition, in connection with the execution of this letter agreement and your assumption of the role of Chief Executive Officer, the Board or its Compensation Committee will grant you an option under the 2009 Plan, to purchase 1,973,136 shares of the Company's common stock at a price per share equal to the fair market value at the time of Board approval of such options, as determined by the Board pursuant to the 2009 Plan (the "Promotion Option"). Twenty-five percent (25%) of the shares subject to the Promotion Option shall vest on April 8, 2016 and the remaining shares shall vest monthly, on each one month anniversary thereafter, in equal monthly amounts, over the next thirty-six (36) months until the fourth anniversary of April 8, 2015, subject to your continued employment with the Company, service on the Board or otherwise providing service to the Company on each such vesting date, except as otherwise provided in (f) and (g) below. The Promotion Option shall have the same accelerated vesting upon a Change in Control or a termination in Contemplation of a Change in Control as set forth in Section 6(a) above with respect to the Initial Option. The Promotion Option shall be an incentive stock option to the maximum extent permitted by law and shall be subject to the terms and conditions of the 2009 Plan and your actual option grant agreement, including vesting requirements. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment or other service with the Company.

(c) In addition, in connection with or following the closing of the Company's next Qualified Financing (as defined below) and any financing up to it, the Board or its Compensation Committee will grant you options under the 2009 Plan to purchase such number of shares of the Company's common stock as is equal to 6% of the Company's capital stock on a fully diluted basis immediately following the closing of the Qualified Financing (or any interim financing) (x) less any options to purchase common stock previously granted to you by the Company (whether or not such options are then issued and outstanding or exercised and including, without limitation, the Initial Option and the Promotion Option) and (y) without duplication of clause (x), less any shares of common stock issued to you as of the date of the Board approval of the option, at a price per share equal to the fair market value at the time of Board approval of such options, as determined by the Board pursuant to the 2009 Plan (each such option or options, a "Qualified Financing Option"). One hundred percent (100%) of the shares subject to the Qualified Financing Option shall vest monthly over forty-eight (48) months, in equal monthly amounts, beginning on the one month anniversary of the Effective Date, subject to you continuing as an employee, member of Board or otherwise providing service to the Company on each such vesting date, except as otherwise provided in (f) and (g) below. The Qualified Financing Option shall have the same accelerated vesting upon a Change in Control or a termination in Contemplation of a Change in Control as set forth in Section 6(a) above with respect to the Initial Option. The Qualified Financing Option shall be an incentive stock option to the maximum extent permitted by law and shall be subject to the terms and conditions of the 2009 Plan and your actual option grant agreement, including vesting requirements. No right to

any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment or other service with the Company.

(d) For purposes of this letter agreement, a "Change of Control" shall mean: (i) a merger, consolidation or other transaction in which (A) the Company is a constituent party or (B) a subsidiary of the Company is a constituent party, except in the case of either clause (A) or (B) any such merger, consolidation or other transaction involving the Company or a subsidiary of the Company in which the beneficial owners of the shares of capital stock of the Company outstanding immediately prior to such merger, consolidation or other transaction continue beneficially to own, immediately following such merger or consolidation, at least a majority by voting power of the capital stock in approximately the same proportion as before the event of (x) the surviving or resulting corporation or (y) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger, consolidation or other transaction, the parent corporation of such surviving or resulting corporation; (ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or a Company subsidiary of all or substantially all the assets of the Company and the Company subsidiaries taken as a whole (except in connection with a merger or consolidation not constituting a Change of Control under clause (i) or where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned Company subsidiary); or (iii) the sale or transfer, in a single transaction or series of related transactions, by the stockholders of the Company of more than 50% by voting power of the then-outstanding capital stock of the Company to any person or entity or group of affiliated persons or entities.

(e) For purposes of this letter agreement, "Qualified Financing" shall mean the first sale after the date hereof of convertible preferred stock by the Company to investors for bona fide financing purposes from which the Company receives gross proceeds when combined with prior convertible preferred stock sold by the Company (and including proceeds from any indebtedness of the Company that converts into equity in such financing) of not less than thirty-eight million dollars and ninety-five cents ($38,000,000.95).

(f) Accelerated Vesting Upon Termination by the Company Without Cause or by the Executive for Good Reason. If, after the Effective Date, your Business Relationship is terminated by the Company without Cause or by you for Good Reason, then any options granted to you by the Company during your Business Relationship (including the Initial Option, the Promotion Option and the Qualified Financing Option) shall vest as to all of the then unvested portion of the option that would have vested if your Business Relationship continued for twelve (12) months following such termination. "Business Relationship" shall include service as an employee, officer, director, advisor or consultant to the Company or its successor.

(g) Accelerated Vesting Upon Death or Disability. If, after the Effective Date, your Business Relationship is terminated on account of your death or disability (as defined in the 2009 Plan), then any options granted to you by the Company during your Business Relationship (including the Initial Option, the Promotion Option and the Qualified Financing Option) shall vest as to all of the then unvested portion of the option that would have vested if your Business Relationship continued for twelve (12) months following such termination.

(h) Net Exercise; Adjustment for Extraordinary Dividends. The Initial Option permits and the Promotion Option and Qualified Financing Option shall permit a net exercise with respect to payment of the option exercise price but not with respect to satisfaction of applicable tax withholding. The option agreement for the Initial Option provides and the option agreement for the Promotion Option and Qualified Financing Option will provide for an equitable adjustment to such options in the event of a dividend or distribution to holders of common stock (other than an ordinary cash dividend), in addition to other adjustments provided for under the 2009 Plan.

(i) Post Termination Exercise Period. The Initial Option is and the Promotion Option and Qualified Financing Option shall be exercisable for eighteen (18) months following the termination of your Business Relationship, but in no event later than the Final Exercise Date, as set forth in the applicable option agreement; provided that in the event the Business Relationship terminates for Cause, the Initial Option, the Promotion Option and the Qualified Financing

Option (and any and all other options granted to you by the Company during your Business Relationship) shall terminate immediately and automatically on the date of your termination with respect to both the vested and unvested portions of such options.

(j) Piggyback Registration Rights. You and the Company acknowledge and agree that, prior to the date hereof in accordance with the Prior Letter Agreement, the Company undertook all requisite actions in order to add you as a party to that certain Second Amended and Restated Registration Rights Agreement, dated as of April 16, 2014, among the Company and the other parties thereto (as such agreement may be amended and/or restated from time to time, the "Registration Rights Agreement") for the purpose of providing you with "piggyback" registration rights pursuant to Section 4 of the Registration Rights Agreement, with respect to any shares of the Company's common stock issued to you by the Company upon the exercise of the Initial Option, the Promotion Option, the Qualified Financing Option or otherwise.

7. Severance.

(a) In the event that your employment is terminated by you for Good Reason or by the Company without Cause, you will receive severance (i) of twelve (12) months of your then-current base salary (such twelve-month period, the "Severance Period"), (ii) any bonus earned for the year prior to the year of termination that has not yet been paid, (iii) an amount equal to 100% of your target bonus for the year of termination payable in a lump sum on the Payment Date, (iv) a pro-rated portion of any bonus attributable to the year of termination payable at the time that active employees receive their bonus payments for that year but in any event by March 15 of the year following the year of your termination, based on the Company's performance against previously established Company (but not individual) milestones and (iv) COBRA continuation medical benefits for the Severance Period on the same terms as were applicable to you prior to your termination. All payments (other than the pro-rated portion of any bonus and the COBRA continuation) will be made in a lump sum on the Payment Date (as defined below). The payments and benefits provided for in this Section 7(a) shall be subject to Exhibit A. Termination of your employment for Cause will result in no severance pay, but you will be entitled to receive the Accrued Amounts (as defined below).

(b) As a condition precedent to the receipt of any severance payments pursuant to this letter agreement, you will be required to execute a separation agreement and general release of claims in favor of the Company, substantially in the form attached hereto as Exhibit B, and any revocation period applicable to such release must expire, within sixty (60) days following your date of termination (the date on which the revocation period expires, the "Payment Date"). Notwithstanding the foregoing, if the 60th day following your date of termination occurs in the calendar year following the year in which your termination occurs, then the Payment Date shall be no earlier than January 1 of the calendar year following the year in which your termination occurs.

(c) For purposes of this letter agreement, "Cause" shall mean: (i) indictment or conviction of, any felony or any other crime involving dishonesty; (ii) participation in any fraud, deliberate and substantial misconduct, breach of duty of loyalty or breach of fiduciary duty, in each case, against the Company; (iii) intentional and substantial damage to any property of the Company; (iv) serious willful misconduct by you that in the good faith and reasonable judgment of the Board demonstrates gross unfitness to serve as the Company's Chief Executive Officer, Chairman of the Company or a member of the Board; (v) your willful and repeated failure or refusal to attempt to perform your duties to the Company which is not cured within twenty (20) days after the giving of written notice to you of such failure or refusal; (vi) your failure to secure and maintain work visas or other documentation sufficient to allow your service to the Company in the United States in the manner contemplated herein; or (vii) your material breach of this letter agreement or any other agreement between you and the Company, including the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement (as defined below) to which you are a party, in either case, which breach (if capable of cure) remains uncured for a period of twenty (20) days after written notice to you from the Company.

(d) For purposes of this letter agreement, "Good Reason" shall mean: (i) a material reduction in annual base salary; (ii) a material breach by the Company of this letter agreement; (iii) the relocation of your place of employment more than fifty (50) miles from your then current location without your express written consent; or (iv) a material reduction in your job duties, authority or responsibilities as the Company's Chief Executive Officer, Chairman of the Company or as a member of the Board (provided that, for the avoidance of doubt, termination or disbandment of a committee of the Board or subcommittee thereof of which you are a member shall not constitute a material reduction in your job duties, authority or responsibilities); provided that none of the foregoing shall qualify as Good Reason unless, within ninety (90) days of the occurrence of the event you claim so qualifies, you shall have provided the Board with written notice specifying in detail the basis for such claim and an opportunity to cure the claimed Good Reason and the Company fails to cure such Good Reason within thirty (30) days of its receipt of your notice; provided further that no termination for Good Reason shall so qualify unless you shall terminate your employment at the Company no more than thirty (30) days following the expiration of the Company's cure period. For the avoidance of doubt, the following shall not constitute Good Reason: mutual agreement by you and the Company to reduce the number of days or hours that you are expected to work. Good Reason shall also include a Change of Control.

8. At-Will Employment. You should be aware that your employment with the Company is for no specified period and constitutes at-will-employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice. We request that in the event of resignation, you give the Company at least two weeks' notice. Upon any termination of your Business Relationship, you will be entitled to the Accrued Amounts, which shall include: (i) unpaid base salary through your last day of service, (ii) any accrued but unpaid vacation, (iii) any unreimbursed expenses, (iv) in accordance with the terms of any benefit or equity plan, any benefits or equity due upon termination, (v) except in the case of a termination for Cause, any bonus earned for the year prior to the year of termination that has not yet been paid, payable when bonuses are paid to employees generally, but no later than March 15 of the year following the year to which the bonus relates, and (vi) in the case of a termination on account of your death or disability, a pro-rated portion of any target bonus attributable to the year of termination payable at the time that active employees receive their bonuses for such year, based on the Company's performance against previously established Company (but not individual) milestones.

9. Arbitration and Equitable Relief. Should a dispute arise in connection with this letter agreement or your employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this letter agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this letter agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The arbitrator may grant injunctive or other relief in such dispute or controversy. The decision of the arbitrator, shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any provision of applicable law notwithstanding, they will not request and the arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this Section 9 to the contrary, claims may be made in any Massachusetts court of competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any

confidentiality or non-competition obligations of the other party. If you are successful in the arbitration, as determined by the arbitrator, the arbitrator shall award you your reasonable legal fees and expenses.

10. Indemnification. You shall be entitled to corporate indemnification and insurance coverages to the same extent provided to other senior officers and directors of the Company and such protection shall survive the termination of your Business Relationship to the extent provided for in the Company's indemnification coverage for officers and directors.

11. Confidential Information. You acknowledge the continuing effectiveness of the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement

(the "Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement") which you executed as a condition of your employment with the Company; provided that the reference to "former Executive Chairman" in Section 6 of the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement shall be read to mean, solely with respect to such Section 6, "former Chairman or Chief Executive Officer".

12. Section 280G

(a) If any payment or benefit (including payments and benefits pursuant to this Agreement) that you would receive in connection with an Acquisition from the Company or otherwise ("Transaction Payment") would (a) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this Section 12, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then the Company shall cause to be determined, before any amounts of the Transaction Payment are paid to you, which of the following two alternative forms of payment would result in your receipt, on an after-tax basis, of the greater amount of the Transaction Payment notwithstanding that all or some portion of the Transaction Payment may be subject to the Excise Tax: (1) payment in full of the entire amount of the Transaction Payment (a "Full Payment"), or (2) payment of only a part of the Transaction Payment so that you receive the largest payment possible without the imposition of the Excise Tax (a "Reduced Payment"). Notwithstanding the foregoing, at your election and in lieu of the foregoing, if you execute a waiver of the portion of such excess parachute payment such that all non-waived payments would not be subject to the Excise Tax, the Company shall agree to seek approval of its stockholders in a manner that complies with Section 2800(b)(5)(B) of the Code and Treasury Regulation Section 1.280G-1 such that if such stockholder approval is obtained, the waived payments shall be restored. "Acquisition" shall mean a change in the ownership or control of the Company or a change in the ownership of a substantial portion of the assets of the Company, in each case as determined under Section 280G and the Treasury Regulations thereunder.

(b) For purposes of determining whether to make a Full Payment or a Reduced Payment, the Company shall cause to be taken into account all applicable federal, state and local income and employment taxes and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes). If a Reduced Payment is made, (x) you shall have no rights to any additional payments and/or benefits constituting the Transaction Payment, and (y) reduction in payments and/or benefits shall occur in the manner that results in the greatest economic benefit to you as determined in this paragraph. If more than one method of reduction will result in the same economic benefit, the portions of the Payment shall be reduced pro rata.

(c) The independent registered public accounting firm or law firm engaged by the Company as of the day prior to the effective date of the Acquisition shall make all determinations required to be made under this Section 12, If the independent registered public accounting firm or law firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Acquisition, the Company shall appoint a nationally recognized independent registered public accounting firm or law firm that is reasonably

acceptable to you (and such acceptance shall not be unreasonably withheld) to make the determinations required hereunder. The Company shall bear all reasonable expenses with respect to the determinations by such independent registered public accounting firm or law firm required to be made hereunder. The independent registered public accounting firm or law firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and you within fifteen (15) calendar days after the date on which your right to a Transaction Payment is triggered or such other time as reasonably requested by the Company or you. If the independent registered public accounting firm determines that no Excise Tax is payable with respect to the Transaction Payment, either before or after the application of the Reduced Amount, it shall furnish the Company and you with detailed supporting calculations of its determinations that no Excise Tax will be imposed with respect to such Transaction Payment. Any good faith determinations of the accounting firm made hereunder shall be final, binding and conclusive upon the Company and you.

13. Miscellaneous.

(a) You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing (or that purports to prevent) you from being employed by or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this letter agreement, except as provided pursuant to (c) below.

(b) If you have not already done so, you must disclose to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed. It is the Company's understanding that any such agreements will not prevent you from performing the duties of your position and you represent that such is the case. Additionally, you agree not to bring any third party confidential information to the Company, including that of your former employer, and that in performing your duties for the Company you will not in any way utilize any such information.

(c) The Company maintains a smoke-free, drug-free workplace policy and supports equal employment opportunities for all of its employees. As an employee of the Company, you are required to comply with all Company policies and procedures. Violations of the Company's policies may lead to immediate termination of your employment, but shall only be treated as Cause to the extent of that definition. Further, the Company's premises, including all workspaces, furniture, documents, and other tangible materials, and all information technology resources of the Company (including computers, data and other electronic files, and all internet and email) are subject to oversight and inspection by the Company at any time. Company employees should have no expectation of privacy with regard to any Company premises, materials, resources, or information but the Company recognizes that you are also involved with other entities and shall respect the confidentiality and privacy of any such documents and information.

(d) Notices. Any notices from one party to the other will be in writing and will be given by addressing the same to the other at the address set forth in this letter agreement or such other address as either party may provide in accordance with this paragraph 13(d).

Notices to the Company will be marked "President." Notice will be deemed to have been duly given when (a) deposited in the United States mail with proper postage for first class registered or certified mail, return receipt requested, (b) sent by any reputable commercial courier or (c) delivered personally.

(e) Assignment. All of the terms and provisions of this letter agreement shall be binding on and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives successor and assigns of the parties hereto (including, in the case of the Company, any acquiror), except that your duties and responsibilities under this letter agreement are of a personal nature and shall not be assignable or delegable in whole or in part by you and the Company may only assign this Agreement to an entity that assumes all or substantially all of its assets and that assumes this Agreement in writing.

(f) Modification; Amendment. This letter agreement may not be modified or amended except by a written agreement signed by you and an authorized representative of the Company.

(g) Entire Agreement. This letter agreement constitutes the complete, final and entire agreement between you and the Company with respect to the terms and conditions of your membership on the Board and employment with the Company and supersedes any and all prior or contemporaneous agreements, discussions and understandings, whether written or oral, relating to the subject matter of this letter agreement or your employment with the Company.

(h) Governing Law. This letter agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

(i) Counterparts. This letter agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

If this letter agreement correctly sets forth the terms under which you will continue to be employed by the Company, effective as of the Effective Date, please sign the enclosed duplicate of this letter agreement in the space provided below and return it to the undersigned with originals to follow.

[Signatures on Following Page]

Sincerely,

KALA PHARMACEUTICALS, INC.

/s/ Charlie McDermott
Name: Charlie McDermott
Title: President

The foregoing correctly sets forth the terms under which I will be employed by the Company, effective as of the Effective Date. I am not relying on any representations other than those set forth above.

Signature: /s/ Mark Iwicki
Name : Mark Iwicki

Date: 9-11-15

Enclosures (3)
Duplicate Original Letter Agreement
Exhibit A: Payments Subject to Section 409A
Exhibit B: Form of Separation and Release Agreement

EXHIBIT A

Payments Subject to Section 409A

1. Subject to this Exhibit A, any severance payments that may be due under the letter agreement shall begin only upon the date of your "separation from service" (determined as set forth below) which occurs on or after the termination of your employment. The following rules shall apply with respect to distribution of the severance payments, if any, to be provided to you under the letter agreement, as applicable:

(a) It is intended that each installment of the severance payments under the letter agreement provided under shall be treated as a separate "payment" for purposes of Section 409A of the Internal Revenue Code ("Section 409A"). Neither the Company nor you shall have the right to accelerate or defer the delivery of any such payments except to the extent specifically permitted or required by Section 409A.

(b) If, as of the date of your "separation from service" from the Company, you are not a "specified employee" (within the meaning of Section 409A), then each installment of the severance payments shall be made on the dates and terms set forth in the letter agreement.

(c) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of Section 409A), then:

(i) Each installment of the severance payments due under the letter agreement that, in accordance with the dates and terms set forth herein, will in all circumstances, regardless of when your separation from service occurs, be paid within the short-term deferral period (as defined under Section 409A) shall be treated as a short-term deferral within the meaning of Treasury Regulation Section 1.409A-1(b)(4) to the maximum extent permissible under Section 409A and shall be paid on the dates and terms set forth in the letter agreement; and

(ii) Each installment of the severance payments due under the letter agreement that is not described in this Exhibit A, Section 1(c)(i) and that would, absent this subsection, be paid within the six-month period following your "separation from service" from the Company shall not be paid until the date that is six months and one day after such separation from service (or, if earlier, your death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six months and one day following your separation from service and any subsequent installments, if any, being paid in accordance with the dates and terms set forth herein; provided, however, that the preceding provisions of this sentence shall not apply to any installment of payments if and to the maximum extent that that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of your second taxable year following the taxable year in which the separation from service occurs.

2. The determination of whether and when your separation from service from the Company has occurred shall be made and in a manner consistent with, and based on the presumptions set forth in, Treasury Regulation Section 1.409A-1(h). Solely for purposes of Section 2 of this Exhibit A, "Company" shall include all persons with whom the Company would be considered a single employer under Section 414(b) and 414(c) of the Code.

3. All reimbursements and in-kind benefits provided under this letter agreement shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this letter agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.

4. The Company makes no representation or warranty and shall have no liability to you or to any other person if any of the provisions of the letter agreement (including this Exhibit A) are determined to constitute deferred compensation subject to Section 409A but that do not satisfy an exemption from, or the conditions of, that section.

5. This Agreement is intended to comply with, or be exempt from, Section 409A and shall be interpreted accordingly.

[Remainder of page intentionally left blank.]

EXHIBIT B

Form of Separation and Release Agreement

[KALA LETTERHEAD]

BY [METHOD OF DELIVERY]

[INSERT DATE]

[INSERT EMPLOYEE NAME]
[INSERT EMPLOYEE ADDRESS]

Dear **[INSERT EMPLOYEE NAME]**:

The purpose of this letter agreement is to confirm the terms regarding your separation of employment from Kala Pharmaceuticals, Inc. (the "Company"), effective **[INSERT SEPARATION DATE]**. The Company will provide you with the severance benefits described in Section 2 below if you sign and return this letter agreement (the "Agreement") to the Company by **[Insert Return Date — *At least 21 days after agreement is received by the employee* (but no earlier than the Separation Date)]** and it becomes binding between you and the Company. By signing and returning this Agreement and not revoking your acceptance, you will be entering into a binding agreement with the Company and will be agreeing to the terms and conditions set forth in the numbered paragraphs below, including the release of claims set forth in Section 3. Therefore, you are advised to consult with an attorney before signing this Agreement and you have been given at least twenty-one (21) days to do so. If you sign this Agreement, you may change your mind and revoke your agreement during the seven (7) day period after you have signed it by notifying me in writing. If you do not so revoke, this Agreement will become a binding agreement between you and the Company upon the expiration of the seven (7) day period.

If you choose not to sign and return this Agreement by **[Insert Return Date - Same as Above]** or if you timely revoke your acceptance in writing, you shall not receive any severance benefits from the Company. You will, however, receive payment on your Separation Date, as defined below, for your final wages and any unused vacation time accrued through the Separation Date. You may also, if eligible, elect to continue receiving group medical insurance pursuant to the federal "COBRA" law, 29 U.S.C. § 1161 et seq. Please consult the COBRA materials to be provided by the Company under separate cover for details regarding these benefits. Further, please consult the amended and restated letter agreement between you and the Company dated [•], 2015 (the "2015 Letter Agreement") for information concerning your rights with respect to your stock options.

The following numbered paragraphs set forth the terms and conditions that will apply if you timely sign and return this Agreement.

1. **Separation Date**. Your effective date of separation from the Company is **[INSERT SEPARATION DATE](1)** (the "Separation Date"). As of the Separation Date, all salary payments from the Company will cease and any benefits you had as of the Separation

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(1) Please note that, if the Separation Date is after the date of this Agreement, the Agreement will need to be modified, as certain return dates will change.

Date under Company-provided benefit plans, programs, or practices will terminate, except as required by federal or state law.

2. **Description of Severance Benefits**. If you timely sign and return this Agreement and do not revoke your acceptance, the Company will provide the severance benefits set forth in the 2015 Letter Agreement as amended from time to time, between you and the Company (the "Severance Benefits"). You will not be eligible for, nor shall you have a right to receive, any payments or benefits from the Company following the Separation Date other than as described in Section 2 hereof and the 2015 Letter Agreement.

3. **Representation on Action**. You represent that you have not filed or reported any complaints, claims or actions against any of the Released Parties with any state, federal or local agency or court.

4. **Release**. In consideration of the Severance Benefits, which you acknowledge you would not otherwise be entitled to receive, you hereby fully, forever, irrevocably and unconditionally release, remise and discharge the Company, its affiliates, subsidiaries, parent companies, predecessors, and successors, and all of their respective past and present officers, directors, stockholders, partners, members, employees, agents, representatives, plan administrators, attorneys, insurers and fiduciaries (each in their individual and corporate capacities but only so far as related to their relationship with the Company) (collectively, the "Released Parties") from any and all claims, charges, complaints, demands, actions, causes of action, suits, rights, debts, sums of money, costs, accounts, reckonings, covenants, contracts, agreements, promises, doings, omissions, damages, executions, obligations, liabilities, and expenses (including attorneys' fees and costs), of every kind and nature that you ever had or now have against any or all of the Released Parties, including, but not limited to, any and all claims arising out of or relating to your periods of employment with and/or separations from the Company, including, but not limited to, all claims under Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq., the Americans With Disabilities Act of 1990, the Age Discrimination in Employment Act, 29 U.S.C. § 621 et seq., 42 U.S.C. § 12101 et seq., the Genetic Information Nondiscrimination Act of 2008, 42 U.S.C. § 2000ff et seq., the Family and Medical Leave Act, 29 U.S.C. § 2601 et seq., the Worker Adjustment and Retraining Notification Act ("WARN"), 29 U.S.C. § 2101 et seq., the Rehabilitation Act of 1973, 29 U.S.C. § 701 et seq., Executive Order 11246, Executive Order 11141, the Fair Credit Reporting Act, 15 U.S.C. § 1681 et seq., and the Employee Retirement Income Security Act of 1974 ("ERISA"), 29 U.S.C. § 1001 et seq., all as amended; all claims arising out of the Massachusetts Fair Employment Practices Act., M.G.L. c. 151B, § 1 et seq., the Massachusetts Wage Act, Mass. Gen. Laws ch. 149, § 148 et seq. (Massachusetts law regarding payment of wages and overtime), the Massachusetts Civil Rights Act, M.G.L. c. 12, §§ 11H and 11I, the Massachusetts Equal Rights Act, M.G.L. c. 93, § 102 et seq. and M.G.L. c. 214, § 1C, the Massachusetts Small Necessities Leave Act, M.G.L. c. 149, § 52D, the Massachusetts Equal Pay Law, M.G.L. c. 149, § 105A et seq., the Massachusetts Maternity Leave Act, M.G.L. c. 149, § 105D, and the Massachusetts Privacy Act, M.G.L. c. 214, § 1B, all as amended; all common law claims including, but not limited to, actions in defamation, intentional infliction of emotional distress, misrepresentation, fraud, wrongful discharge, and breach of contract; all federal and state whistleblower claims to the extent permitted by law; all claims to any non-vested ownership interest in the Company, contractual or otherwise, and any claim or damage arising out of your

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periods of employment with and/or separation from the Company (including a claim for retaliation) under any common law theory or any federal, state or local statute or ordinance not expressly referenced above; provided, however, that nothing in this Agreement prevents you from filing a charge with, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission or a state fair employment practices agency (except that you acknowledge that you may not recover any monetary benefits in connection with any such claim, charge or proceeding and you further waive any rights or claims to any payment, benefit, attorneys' fees or other remedial relief in connection with any such claim, charge or proceeding); and further provided that this letter agreement shall not release rights to indemnification, advancement of legal fees and directors and officers liability insurance coverage or any rights to vested equity or vested benefits.

5. **Post-Separation Obligations**. You acknowledge and reaffirm your obligation to keep confidential and not to disclose any and all non-public information concerning the Company that you acquired during the course of your periods of employment with the Company, including, but not limited to, any non-public information concerning the Company's business affairs, business prospects, and financial condition. You further acknowledge and reaffirm your obligations under the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement you previously executed for the benefit of the Company, which remains in full force and effect.

6. **Non-Disparagement**. You understand and agree that, in consideration of the Severance Benefits and the Company's commitment to you as to non-disparagement, you shall not make any false, disparaging or derogatory statements to any person or entity, including, without limitation, any media outlet, industry group, financial institution or current or former employee, consultant, client or customer of the Company, regarding the Company or any of its directors, officers, employees, agents or representatives or about the Company's business affairs or financial condition. Additionally, neither the Company nor its officers and directors shall make any false, disparaging or derogatory statement about you to any third party. Nothing herein shall be construed as preventing any of you, the Company, or the Company's officers and directors from making truthful disclosures to any governmental entity or in any litigation or arbitration or from making normal competitive type statements or rebutting false or misleading statements made by others. This provision shall cease to apply two (2) years after the Separation Date.

7. **Cooperation**. To the extent permitted by law, you agree to reasonably cooperate with the Company in the defense or prosecution of any claims or actions which already have been brought, are currently pending, or which may be brought in the future against or on behalf of the Company, whether before a state or federal court, any state or federal government agency, or a mediator or arbitrator related to your period of employment with the Company (other than matters adverse to you). Your reasonable cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare its claims or defenses, to prepare for trial or discovery or an administrative hearing or a mediation or arbitration and to act as a witness when requested by the Company at reasonable times designated by the Company, which shall be set to reasonably recognize your other commitments and limit your travel. You agree that you will, to the extent permitted by law, notify the Company promptly in the event that you are served with a subpoena or in the event that you are

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asked to provide a third party with information concerning any actual or potential complaint or claim against the Company, in each case with respect to matters related to the employment period. The Company will promptly reimburse you for your reasonable out-of-pocket expenses in connection with such cooperation.

8. **Return of Company Property**. You represent and confirm that you have returned to the Company all Company-owned property in your possession, custody or control, including, without limitation, all keys, files, documents and records (and copies thereof), equipment (including, but not limited to, computer hardware, software and printers, wireless handheld devices, cellular phones, pagers, etc.), Company identification and Company vehicles, and that you have left intact all electronic Company documents, including, without limitation, those that you developed or helped to develop during your employment. You further confirm that you have cancelled all accounts for your benefit, if any, in the Company's name, including, without limitation, credit cards, telephone charge cards, cellular phone and/or pager accounts, and computer accounts. The Company confirms that you may retain your address book.

9. **Business Expenses and Final Compensation**. You acknowledge that you have submitted to the Company documentation for all business expenses incurred in conjunction with the performance of your employment and that no other reimbursements are owed to you.

10. **Amendment and Waiver**. This Agreement shall be binding upon the parties and may not be modified in any manner, except by an instrument in writing of concurrent or subsequent date signed by duly authorized representatives of the parties hereto. This Agreement is binding upon and shall inure to the benefit of the parties and their respective agents, assigns, heirs, executors, successors and administrators. No delay or omission by the Company in exercising any right under this Agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar to or waiver of any right on any other occasion.

11. **Validity**. Should any provision of this Agreement be declared or be determined by any court of competent jurisdiction to be illegal or invalid, the validity of the remaining parts, terms or provisions shall not be affected thereby and said illegal or invalid part, term or provision shall be deemed not to be a part of this Agreement.

12. **Confidentiality**. To the extent permitted by law, you understand and agree that as a condition of the Severance Benefits herein described, the terms and contents of this Agreement, and the contents of the negotiations and discussions resulting in this Agreement, shall be maintained as confidential by you and your agents and representatives and shall not be disclosed except to the extent required by federal or state law or as otherwise agreed to in writing by the Company, provided, however, that nothing herein shall prevent you from making truthful disclosures to any governmental entity or in any litigation or arbitration.

13. **Tax Provision**. In connection with the Severance Benefits to be provided to you pursuant to this Agreement, the Company shall withhold and remit to the tax authorities the amounts required under applicable law, and you shall be responsible for all applicable taxes with respect to such Severance Benefits under applicable law. You acknowledge that you are not

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relying upon advice or representation of the Company with respect to the tax treatment of any of the Severance Benefits.

14. **Nature of Agreement**. You understand and agree that this Agreement is a severance agreement and does not constitute an admission of liability or wrongdoing on the part of the Company.

15. **Acknowledgments**. You acknowledge that you have been given at least twenty-one (21) days to consider this Agreement, and that the Company is hereby advising you to consult with an attorney of your own choosing prior to signing this Agreement. You understand that you may revoke this Agreement for a period of seven (7) days after you sign this Agreement by notifying me in writing, and the Agreement shall not be effective or enforceable until the expiration of this seven (7) day revocation period. You understand and agree that by entering into this Agreement, you are waiving any and all rights or claims you might have under the Age Discrimination in Employment Act, as amended by the Older Workers Benefit Protection Act, and that you have received consideration beyond that to which you were previously entitled.

16. **Voluntary Assent**. You affirm that no other promises or agreements of any kind have been made to or with you by any person or entity whatsoever to cause you to sign this Agreement, and that you fully understand the meaning and intent of this Agreement. You state and represent that you have had an opportunity to fully discuss and review the terms of this Agreement with an attorney. You further state and represent that you have carefully read this Agreement, understand the contents herein, freely and voluntarily assent to all of the terms and conditions hereof, and sign your name of your own free act.

17. **Arbitration and Equitable Relief**. Should a dispute arise in connection with, relating to, or concerning this Agreement, the parties obligations thereunder, your employment with or your separation from employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this Agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this Agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The arbitrator may grant injunctive or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any provision of applicable law notwithstanding, they will not request and the arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this Section 18 to the contrary, claims may be made in any Massachusetts court of competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any provision of this Agreement. Both you and the Company expressly waive any right that any party either has or may have to a jury trial of any dispute arising out of or in any way related to your employment with or termination from the Company. If you are successful in the arbitration, as determined by the arbitrator, the arbitrator shall award you your reasonable legal fees and expenses.

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18. **Applicable Law**. This Agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

19. **Entire Agreement**. This Agreement contains and constitutes the entire understanding and agreement between the parties hereto with respect to your Severance Benefits and the settlement of claims against the Company and cancels all previous oral and written negotiations, agreements, and commitments in connection therewith. Nothing in this Section 20, however, shall modify, cancel or supersede your obligations set forth in Section 6 above.

[Signature page follows.]

If you have any questions about the matters covered in this Agreement, please call **[INSERT NAME AND TELEPHONE NUMBER]**.

Very truly yours,

Kala Pharmaceuticals, Inc.

By: _____
[INSERT NAME]
[INSERT TITLE]

I hereby agree to the terms and conditions set forth above. I have been given at least twenty-one (21) days to consider this Agreement, and I have chosen to execute this on the date below. I intend that this Agreement will become a binding agreement between me and the Company if I do not revoke my acceptance in seven (7) days.

_____
[INSERT EMPLOYEE NAME] Date

To be returned in a timely manner as set forth on the first page of this Agreement.

100 Beaver Street, Suite 201, Waltham, MA 02453 · Voice 781 996 5252 · Fax 781 642 0399 · www.kalarx.com

August 19, 2014

Dear Hongming:

This letter agreement amends and restates in its entirety the letter agreement, dated November 10, 2009 provided to you by Hanes Newco, Inc. (now renamed Kala Pharmaceuticals, Inc. (the "Company") in connection with the commencement of your employment with the Company. Subject to the terms and conditions set forth in this letter agreement, I am pleased to offer you the position of Chief Scientific Officer of the Company effective as of July 21, 2014. In this position you will report directly to the Company's Chief Executive Officer, the President or Interim President of the Company or to such member or members of the Board of Directors of the Company (the "Board") as the Board shall determine from time to time. You will be expected to devote your full business time and your best professional efforts to the performance of your duties and responsibilities for the Company, and to abide by all Company policies and procedures as in effect from time to time. You will be expected to perform the duties of your position, together with such other duties as may reasonably be assigned to you from time to time, on the understanding that all assigned duties will be generally consistent with your position as Chief Scientific Officer. Moreover, during your employment with the Company, you will be expected to conduct your business activities at all times in accordance with the highest legal, ethical and professional standards.

Base Salary: You shall be paid on a bi-weekly basis at an annual base rate of $310,000, such salary to be paid in accordance with Company's standard payroll practices. Your base salary will be reviewed annually by the Compensation Committee of the Board (the "Compensation Committee"). Your salary may be increased but may not be decreased, unless the Company decreases the salary of all similarly situated employees of the Company generally, in which case your salary may be proportionately decreased.

Cash Bonus: You will also be eligible to earn a performance-based bonus with a target of 30% of your annual base salary. Payment of this bonus shall be based on written Company and personal objectives and criteria established by the Compensation Committee. The cash bonus, if any, will be determined by the Board in its discretion, will be paid annually after the first of the year (but in no event later than March 15), subject to you being employed with the Company on the preceding December 31st.

Benefits: In addition to your compensation as set forth above, you are eligible during your employment to participate in all employee benefit plans made generally available by the Company to its employees from time to time, subject to plan terms and generally applicable Company policies. These benefits, of course, may be modified or changed from time to time for executives and employees generally in the sole discretion of the Company, and the provision of such benefits to you in no way changes or impacts your status as an at-will employee. Additionally, the Company will reimburse you for all actual, necessary and reasonable expenses you incur in the course of the Company's business, subject to the Company's expense policy as in effect from time to time and the terms of Exhibit A, attached hereto.

Equity: Subject to approval by the Board, the Company shall grant you an option (the "Option") under the Company's 2009 Employee, Director and Consultant Equity Incentive Plan (as amended to date, the "2009 Plan") to purchase 574,146 shares of the Company's common stock at an exercise price equal to the fair market value thereof as of the date of Board approval. The shares subject to the Option shall vest monthly over forty-eight (48) months, in equal monthly amounts, with the first vesting date occurring one month after the date hereof, subject to your continuing employment with the Company. You will also be eligible for annual grants of options, including but not limited to performance-based options and/or milestone-based options, said grants to be made in the sole discretion of the Board.

All options and shares granted to you that vest based solely on your continued service with the Company will immediately vest if, during your employment: (i) a Change of Control (as defined below) occurs and, within twelve (12) months following such Change of Control, the Company or its successor terminates your employment without Cause (as defined below) or you voluntarily terminate your employment for Good Reason (as defined below), (ii) the Company terminates your employment without Cause, or (iii) you voluntarily terminate your employment for Good Reason. In any of these events, one hundred percent (100%) of the options that vest based solely on your continued service with the Company and are not then vested, and which have not been exercised, cancelled or forfeited, shall become vested and exercisable in full as of the date of such termination. The period for exercising such Options shall be as set forth in the applicable stock option plan, certificate or agreement.

A "Change of Control" shall mean, for purposes of the foregoing paragraph, (i) a merger or consolidation in which (A) the Company is a constituent party, or (B) a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except in the case of either clause (A) or (B) any such merger or consolidation involving the Company or a subsidiary of the Company in which the beneficial owners of the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue beneficially to own, immediately following such merger or consolidation, at least a majority by voting power of the capital stock of (x) the surviving or resulting corporation or (y) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; (ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or a Company subsidiary of all or substantially all the assets of the Company and the Company subsidiaries taken as a whole (except in connection with a merger or consolidation not constituting a Change of Control under clause (i) or where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned

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Company subsidiary); or (iii) the sale or transfer, in a single transaction or series of related transactions, by the stockholders of the Company of more than 50% by voting power of the then-outstanding capital stock of the Company to any person or entity or group of affiliated persons or entities.

"Good Reason" shall mean: (1) a reduction in Base Salary or material reduction in benefits other than such a reduction that is proportionate to a reduction in salary or benefits of all executives of the Company generally, (2) a material breach by the Company of this letter agreement, (3) the relocation of your place of

employment more than fifty (50) miles from your then current location without your express written consent, (4) a material reduction in your job duties, authority or responsibilities so as to constitute a de facto demotion (other than a change effected in connection with the integration of the operations of the Company into the operations of an acquirer in connection with a Change of Control) or (5) the determination by a court of competent jurisdiction of illegal conduct by the Company or the officers of the Company acting solely in their capacity as officers in the performance of their duties for the Company which conduct and determination has a material adverse effect on the Company. Provided, none of the foregoing shall qualify as Good Reason unless, within ninety (90) days of the occurrence of the event you claim so qualifies, you shall have provided the Board with written notice specifying in detail the basis for such claim, and a reasonable opportunity to cure the claimed Good Reason, and the Company fails to cure such Good Reason within thirty (30) days of its receipt of your notice. Provided further, no termination for Good Reason shall so qualify unless you shall terminate your employment at the Company no more than thirty (30) days following the expiration of the Company's cure period.

Severance: In the event that your employment were to be terminated by you for Good Reason or by the Company without Cause, you will receive severance of ten (10) months of your annual base salary then in effect, plus a pro rated portion of the bonus attributable to the year of termination payable at the time that active employees receive their bonus payments for that year but in any event by March 15 of the year following the year of your termination, based on the Company's and your performance against previously established milestones, together with reimbursement for the cost of up to ten (10) months of COBRA premiums for continued health benefit (medical, dental, and vision) coverage (for so long as you are eligible for such coverage through COBRA). All payments, other than the pro-rated portion of the bonus will be made in a lump sum on the Payment Date (as defined below). The payments and benefits provided for in this paragraph shall be subject to Exhibit A attached hereto.

"Cause" shall mean: (a) commission of, or indictment or conviction of, any felony or any other crime involving dishonesty; (b) participation in any fraud, deliberate and substantial misconduct, breach of duty of loyalty or breach of fiduciary duty against the Company; (c) intentional and substantial damage to any property of the Company; (d) serious misconduct by you that in the good faith and reasonable judgment of the Board demonstrates gross unfitness to serve as Chief Scientific Officer of the Company; (e) persistent, unsatisfactory job performance that remains uncured for at least thirty (30) days following written notice detailing the same from the Company; (f) your failure to secure and maintain work visas or other documentation sufficient to allow your service to the Company in the manner contemplated herein; or (g) your breach of any material provision of this letter agreement or the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement to which you are a party, in either case,

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which breach (if capable of cure) remains uncured for a period of thirty (30) days after written notice to you from the Company. Termination of your employment with Cause will result in no severance pay. Notwithstanding anything to the contrary in any applicable stock option agreement, solely in the event of a termination of your employment for cause you will have fifteen (15) days from such termination to exercise all then vested options.

As a condition precedent to the receipt of any severance payments or accelerated vesting of any options pursuant to this letter agreement or pursuant to any equity award agreement, you will be required to execute a standard separation agreement and general release of claims in favor of the Company, in the form substantially attached hereto as Exhibit B, and any revocation period applicable to such release must expire, within sixty (60) days following your date of termination (the date on which the revocation period expires, the "Payment Date"). Notwithstanding the foregoing, if the 60th day following your date of termination occurs in the calendar year following the year in which your termination occurs, then the Payment Date shall be no earlier than January 1 of such subsequent calendar year.

Attorney's Fees. The Company agrees that it will reimburse you up to a maximum amount of $2,000 for the legal fees incurred by you in connection with the review and negotiation of this letter agreement. The payment will be made directly to the law firm retained by you, subject to receipt of an invoice, with such invoice to be provided within 30 days following the date hereof and such reimbursement to be made within 30 days following receipt of the invoice.

Vacation: You are entitled to twenty-four days of paid vacation per fiscal year. You will be entitled to earn additional vacations with increasing years of service, in accordance with the Company's vacation policy. Any unused vacation will be paid upon termination of your employment, in accordance with the Company's annual vacation accrual policy.

At-Will Employment: You should be aware that your employment with the Company is for no specified period and constitutes at will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice, subject to the terms of this letter agreement.

Arbitration and Equitable Relief: Should a dispute arise in connection with, relating to or concerning this letter agreement or your employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this letter agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this letter agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The Company will pay for the arbitration. The arbitrator may grant injunctive or other relief in such dispute or controversy. The decision of the arbitrator, shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any provision of applicable law notwithstanding, they will not request and the

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arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this paragraph to the contrary, claims may be made in any Massachusetts court of competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any confidentiality or non-competition obligations of the other party.

Indemnification: You shall be entitled to corporate indemnification and insurance coverages to the same extent provided to other senior officers and directors of the Company. In this regard, the Company, at a minimum, shall indemnify you to the fullest extent permitted under its by-laws and/or applicable law. Furthermore, at all times during your employment, the Company will maintain a directors and officers liability insurance policy.

Assignment: All of the terms and provisions of this letter agreement shall be binding on and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto (including, in the case of the Company, any acquiror), except that your duties and responsibilities under this letter agreement are of a personal nature and shall not be assignable or delegable in whole or in part by you.

Miscellaneous:

You represent that you have disclosed to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed. It is the Company's understanding that any such agreements will not prevent you from performing the duties of your position, and you represent that such is the case. You agree that, during the term of your employment with the Company, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with or could reasonably be perceived as conflicting with your obligations to the Company. Similarly, you agree not to bring any third party confidential information to the Company, including that of your former employer, and covenant that in performing your duties for the Company you will not in any way utilize any such information.

The Company maintains a smoke-free, drug-free workplace policy and supports equal employment opportunities for all of its employees. As a Company employee, you are expected to abide by the Company's rules and standards.

You acknowledge the continuing effectiveness of the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement which you executed as a condition of your employment with the Company and which requires, among other things, the assignment of patent rights to any invention made during your employment at the Company, non-disclosure of Company proprietary information, and an agreement not to engage in direct competitive activities with the Company through the twelve (12) month period following the termination of your employment for any reason.

This letter agreement, along with any agreements executed by you and the Company relating to proprietary rights between you and the Company, set forth the terms of your

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employment with the Company and supersede any prior representations and/or agreements including, but not limited to, any representations made during your recruitment, interviews or pre-employment negotiations, whether written or oral. This letter agreement, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed by the Company and you.

This letter agreement is intended to apply and be construed in harmony with your Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement, provided, however, this letter agreement shall control and take precedence in the event of any conflict between it and that agreement.

If this letter agreement correctly sets forth the terms under which you will continue to be employed by the Company, effective as of the date hereof, please sign the enclosed duplicate of this letter agreement in the space provided below and return it to Charlie McDermott via email (charlie.mcdermott@kalarx.com) or fax 781-642-0399 with originals to follow.

Sincerely,

/s/ Charlie McDermott
Name: Charlie McDermott
Title: Interim President and Chief Business Officer

Agreed to and accepted:

Signature: /s/ Hongming Chen

Printed Name: Hongming Chen

Date: 8/19/2014

Enclosures (3)
Duplicate Original Letter Agreement
Exhibit A: Payments Subject to Section 409A
Exhibit B: Form of Separation and Release Agreement

EXHIBIT A

Payments Subject to Section 409A

1. Subject to this Exhibit A, any severance payments that may be due under the letter agreement shall begin only upon the date of your "separation from service" (determined as set forth below) which occurs on or after the termination of your employment. The following rules shall apply with respect to distribution of the severance payments, if any, to be provided to you under the letter agreement, as applicable:

(a) It is intended that each installment of the severance payments under the letter agreement provided under shall be treated as a separate "payment" for purposes of Section 409A. Neither the Company nor you shall have the right to accelerate or defer the delivery of any such payments except to the extent specifically permitted or required by Section 409A.

(b) If, as of the date of your "separation from service" from the Company, you are not a "specified employee" (within the meaning of Section 409A), then each installment of the severance payments shall be made on the dates and terms set forth in the letter agreement.

(c) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of Section 409A), then:

(i) Each installment of the severance payments due under the letter agreement that, in accordance with the dates and terms set forth herein, will in all circumstances, regardless of when your separation from service occurs, be paid within the short-term deferral period (as defined under

Section 409A) shall be treated as a short-term deferral within the meaning of Treasury Regulation Section 1.409A-1(b)(4) to the maximum extent permissible under Section 409A and shall be paid on the dates and terms set forth in the letter agreement; and

(ii) Each installment of the severance payments due under the letter agreement that is not described in this Exhibit A, Section 1(c)(i) and that would, absent this subsection, be paid within the six-month period following your "separation from service" from the Company shall not be paid until the date that is six months and one day after such separation from service (or, if earlier, your death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six months and one day following your separation from service and any subsequent installments, if any, being paid in accordance with the dates and terms set forth herein; provided, however, that the preceding provisions of this sentence shall not apply to any installment of payments if and to the maximum extent that that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of your second taxable year following the taxable year in which the separation from service occurs.

2. The determination of whether and when your separation from service from the Company has occurred shall be made and in a manner consistent with, and based on the

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presumptions set forth in, Treasury Regulation Section 1.409A-1(h). Solely for purposes of this Exhibit A, Section 2, "Company" shall include all persons with whom the Company would be considered a single employer under Section 414(b) and 414(c) of the Code.

3. All reimbursements and in-kind benefits provided under this letter agreement shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this letter agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.

4. The Company makes no representation or warranty and shall have no liability to you or to any other person if any of the provisions of the letter agreement (including this Exhibit) are determined to constitute deferred compensation subject to Section 409A but that do not satisfy an exemption from, or the conditions of, that section.

EXHIBIT B: Form of Separation and Release Agreement

[KALA LETTERHEAD]

BY [METHOD OF DELIVERY]

[INSERT DATE]

[INSERT EMPLOYEE NAME]
[INSERT EMPLOYEE ADDRESS]

Dear **[INSERT EMPLOYEE NAME]**:

The purpose of this letter agreement is to confirm the terms regarding your separation of employment from Kala Pharmaceuticals, Inc. (the "Company"), effective **[INSERT SEPARATION DATE]**. The Company will provide you with the severance benefits described in Section 2 below if you sign and return this letter agreement (the "Agreement") to the Company by **[Insert Return Date — *At least 21 days after agreement is received by the employee* (but no earlier than the Separation Date)]** and it becomes binding between you and the Company. By signing and returning this Agreement and not revoking your acceptance, you will be entering into a binding agreement with the Company and will be agreeing to the terms and conditions set forth in the numbered paragraphs below, including the release of claims set forth in Section 4. Therefore, you are advised to consult with an attorney before signing this Agreement and you have been given at least twenty-one (21) days to do so. If you sign this Agreement, you may change your mind and revoke your agreement during the seven (7) day period after you have signed it by notifying me in writing. If you do not so revoke, this Agreement will become a binding agreement between you and the Company upon the expiration of the seven (7) day period.

If you choose not to sign and return this Agreement by **[Insert Return Date - Same as Above]** or if you timely revoke your acceptance in writing, you shall not receive any severance benefits from the Company. You will, however, receive payment on your Separation Date, as defined below, for your final wages and any unused vacation time accrued through the Separation Date. You may also, if eligible, elect to continue receiving group medical, dental and vision insurance pursuant to the federal "COBRA" law, 29 U.S.C. § 1161 et seq. Please consult the COBRA materials to be provided by the Company under separate cover for details regarding these benefits. Further, pursuant to the Company's 2009 Employee, Director and Consultant Equity Incentive Plan (as amended to date, the "2009 Plan"), you will have up to 90 days after the Separation Date to exercise any vested stock options you may have (as provided for by the 2009 Plan) subject to the terms of the letter agreement between you and the Company dated August[ ], 2014 (the "2014 Letter Agreement"). All unvested stock options will be cancelled on the Separation Date.

The following numbered paragraphs set forth the terms and conditions that will apply if you timely sign and return this Agreement.

1. **Separation Date**. Your effective date of separation from the Company is **[INSERT SEPARATION DATE](1)** (the "Separation Date"). As of the Separation Date, all salary

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(1) Please note that, if the Separation Date is after the date of this Agreement, the Agreement will need to be modified, as certain return dates will change.

payments from the Company will cease and any benefits you had as of the Separation Date under Company-provided benefit plans, programs, or practices will terminate, except as required by federal or state law.

2. **Description of Severance Benefits**. If you timely sign and return this Agreement and do not revoke your acceptance, the Company will provide the following severance benefits set forth in the 2014 Letter Agreement, as amended from time to time, between you and the Company (the "Severance Benefits"). You will not be eligible for, nor shall you have a right to receive, any payments or benefits from the Company following the Separation Date other than as described in this Section 2 and in the 2014 Letter Agreement.

3. **Representation on Action**. You represent that you have not filed or reported any complaints, claims or actions against any of the Released Parties with any state, federal or local agency or court.

4. **Release**. In consideration of the Severance Benefits, which you acknowledge you would not otherwise be entitled to receive, you hereby fully, forever, irrevocably and unconditionally release, remise and discharge the Company, its affiliates, subsidiaries, parent companies, predecessors, and successors, and all of their respective past and present officers, directors, stockholders, partners, members, employees, agents, representatives, plan administrators, attorneys, insurers and fiduciaries (each in their individual and corporate capacities) (collectively, the "Released Parties") from any and all claims, charges, complaints, demands, actions, causes of action, suits, rights, debts, sums of money, costs, accounts, reckonings, covenants, contracts, agreements, promises, doings, omissions, damages, executions, obligations, liabilities, and expenses (including attorneys' fees and costs), of every kind and nature that you ever had or now have against any or all of the Released Parties, including, but not limited to, any and all claims arising out of or relating to your periods of employment with and/or separations from the Company, including, but not limited to, all claims under Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq., the Americans With Disabilities Act of 1990, the Age Discrimination in Employment Act, 29 U.S.C. § 621 et seq., 42 U.S.C. § 12101 et seq., the Genetic Information Nondiscrimination Act of 2008, 42 U.S.C. § 2000ff et seq., the Family and Medical Leave Act, 29 U.S.C. § 2601 et seq., the Worker Adjustment and Retraining Notification Act ("WARN"), 29 U.S.C. § 2101 et seq., the Rehabilitation Act of 1973, 29 U.S.C. § 701 et seq., Executive Order 11246, Executive Order 11141, the Fair Credit Reporting Act, 15 U.S.C. § 1681 et seq., and the Employee Retirement Income Security Act of 1974 ("ERISA"), 29 U.S.C. § 1001 et seq., all as amended; all claims arising out of the Massachusetts Fair Employment Practices Act., M.G.L. c. 151B, § 1 et seq., the Massachusetts Wage Act, Mass. Gen. Laws ch. 149, § 148 et seq. (Massachusetts law regarding payment of wages and overtime), the Massachusetts Civil Rights Act, M.G.L. c. 12, §§ 11H and 11I, the Massachusetts Equal Rights Act, M.G.L. c. 93, § 102 et seq. and M.G.L. c. 214, § 1C, the Massachusetts Small Necessities Leave Act, M.G.L. c. 149, § 52D, the Massachusetts Equal Pay Law, M.G.L. c. 149, § 105A et seq., the Massachusetts Maternity Leave Act, M.G.L. c. 149, § 105D, and the Massachusetts Privacy Act, M.G.L. c. 214, § 1B, all as amended; all common law claims including, but not limited to, actions in defamation, intentional infliction of emotional distress, misrepresentation, fraud, wrongful discharge, and breach of contract; all federal and state whistleblower claims to the extent permitted by law; all claims to any non-vested ownership interest in the Company, contractual or otherwise, and any claim or damage arising out of your periods of employment with and/or separation from the

Company (including a claim for retaliation) under any common law theory or any federal, state or local statute or ordinance not expressly referenced above; provided, however, that nothing in this Agreement prevents you from filing a charge with, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission or a state fair employment practices agency (except that you acknowledge that you may not recover any monetary benefits in connection with any such claim, charge or proceeding and you further waive any rights or claims to any payment, benefit, attorneys' fees or other remedial relief in connection with any such claim, charge or proceeding).

5. **Post-Separation Obligations**. You acknowledge and reaffirm your obligation to keep confidential and not to disclose any and all non-public information concerning the Company that you acquired during the course of your periods of employment with the Company, including, but not limited to, any non-public information concerning the Company's business affairs, business prospects, and financial condition. You further acknowledge and reaffirm your obligations under the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement you previously executed for the benefit of the Company, which remains in full force and effect.

6. **Non-Disparagement**. You understand and agree that, in consideration of the Severance Benefits, you shall not make any false, disparaging or derogatory statements to any person or entity, including, without limitation, any media outlet, industry group, financial institution or current or former employee, consultant, client or customer of the Company, regarding the Company or any of its directors, officers, employees, agents or representatives or about the Company's business affairs or financial condition; provided, however, that nothing herein shall be construed as preventing you from making truthful disclosures to any governmental entity or in any litigation or arbitration. For its part, the Company agrees that, in exchange for the promises and benefits you are conferring on it as described herein, its officers and directors shall be instructed not to make any false, disparaging or derogatory statements to any person or entity, including, without limitation, any media outlet, industry group, financial institution or current or former employee, consultant, client or customer of the Company, regarding you; provided, however, that nothing herein shall be construed as preventing the Company from making truthful disclosures to any governmental entity or in any litigation or arbitration.

7. **Cooperation**. To the extent permitted by law, you agree to cooperate fully with the Company in the defense or prosecution of any claims or actions which already have been brought, are currently pending, or which may be brought in the future against or on behalf of the Company, whether before a state or federal court, any state or federal government agency, or a mediator or arbitrator. Your full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare its claims or defenses, to prepare for trial or discovery or an administrative hearing or a mediation or arbitration and to act as a witness when requested by the Company at reasonable times designated by the Company, provided that such cooperation does not unreasonably interfere with your personal or business affairs. You agree that you will notify the Company promptly in the event that you are served with a subpoena or in the event that you are asked to provide a third party with information concerning any actual or potential complaint or claim against the Company. The Company shall reimburse you for all reasonable expenses (including travel and reasonable attorneys' fees) associated with your cooperation pursuant to this Section 7.

8. **Return of Company Property**. You represent and confirm that you have returned to the Company all Company-owned property in your possession, custody or control, including, without limitation, all keys, files, documents and records (and copies thereof), equipment (including, but not limited to, computer hardware, software and printers, wireless handheld devices, cellular phones, pagers, etc.), Company identification and Company vehicles, and that you have left intact all electronic Company documents, including, without limitation, those that you developed or helped to develop during your employment. You

further confirm that you have cancelled all accounts for your benefit, if any, in the Company's name, including, without limitation, credit cards, telephone charge cards, cellular phone and/or pager accounts, and computer accounts.

9. **Business Expenses and Final Compensation**. You acknowledge that you have been reimbursed by the Company for all business expenses incurred in conjunction with the performance of your employment and that no other reimbursements are owed to you. You further acknowledge that you have received payment in full for all services rendered in conjunction with your periods of employment by the Company, including, without limitation, payment for all wages, bonuses, equity, commissions and accrued, unused vacation time, and that no other compensation is owed to you except as provided herein.

10. **Amendment and Waiver**. This Agreement shall be binding upon the parties and may not be modified in any manner, except by an instrument in writing of concurrent or subsequent date signed by duly authorized representatives of the parties hereto. This Agreement is binding upon and shall inure to the benefit of the parties and their respective agents, assigns, heirs, executors, successors and administrators. No delay or omission by the Company in exercising any right under this Agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar to or waiver of any right on any other occasion.

11. **Validity**. Should any provision of this Agreement be declared or be determined by any court of competent jurisdiction to be illegal or invalid, the validity of the remaining parts, terms or provisions shall not be affected thereby and said illegal or invalid part, term or provision shall be deemed not to be a part of this Agreement.

12. **Confidentiality**. To the extent permitted by law, you understand and agree that as a condition of the Severance Benefits herein described, the terms and contents of this Agreement, and the contents of the negotiations and discussions resulting in this Agreement, shall be maintained as confidential by you and your agents and representatives and shall not be disclosed except to the extent required by federal or state law or as otherwise agreed to in writing by the Company, provided, however, that nothing herein shall prevent you from making truthful disclosures to any governmental entity or in any litigation or arbitration. For its part, the Company agrees to keep the terms and contents of this Agreement, and the contents of the negotiations and discussions resulting in this Agreement, as confidential, and shall not be disclosed except to the extent required by federal or state law, as required by business necessity (e.g., to perform obligations hereunder), or as otherwise agreed to in writing by you, provided, however, that nothing herein shall prevent the Company from making truthful disclosures to any governmental entity or in any litigation or arbitration.

13. **Tax Provision**. In connection with the Severance Benefits to be provided to you pursuant to this Agreement, the Company shall withhold and remit to the tax authorities the amounts required under applicable law, and you shall be responsible for all applicable taxes with respect to such Severance Benefits under applicable law, provided, however, that the Company remains responsible for all applicable taxes that are a Company obligation under applicable law. You acknowledge that you are not relying upon advice or representation of the Company with respect to the tax treatment of any of the Severance Benefits.

14. **Nature of Agreement**. You understand and agree that this Agreement is a severance agreement and does not constitute an admission of liability or wrongdoing on the part of the Company.

15. **Acknowledgments**. You acknowledge that you have been given at least twenty-one (21) days to consider this Agreement, and that the Company is hereby advising you to consult with an attorney of your own choosing prior to signing this Agreement. You understand that you may revoke this Agreement for a period of seven (7) days after you sign this Agreement by notifying me in writing, and the Agreement shall not be effective or enforceable until the expiration of this seven (7) day revocation period. You understand and agree that by entering into this Agreement, you are waiving any and all rights or claims you might have under the Age Discrimination in Employment Act, as amended by the Older Workers Benefit Protection Act, and that you have received consideration beyond that to which you were previously entitled.

16. **Voluntary Assent**. You affirm that no other promises or agreements of any kind have been made to or with you by any person or entity whatsoever to cause you to sign this Agreement, and that you fully understand the meaning and intent of this Agreement. You state and represent that you have had an opportunity to fully discuss and review the terms of this Agreement with an attorney. You further state and represent that you have carefully read this Agreement, understand the contents herein, freely and voluntarily assent to all of the terms and conditions hereof, and sign your name of your own free act.

17. **Arbitration and Equitable Relief**. Should a dispute arise in connection with, relating to, or concerning this Agreement, the parties obligations thereunder, your employment with or your separation from employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this Agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this Agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The Company will pay for the arbitration. The arbitrator may grant injunctive or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any provision of applicable law notwithstanding, they will not request and the arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this Section 17 to the contrary, claims may be made in any Massachusetts court of

competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any provision of this Agreement. Both you and the Company expressly waive any right that any party either has or may have to a jury trial of any dispute arising out of or in any way related to your employment with or termination from the Company.

18. **Applicable Law**. This Agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

19. **Entire Agreement**. This Agreement contains and constitutes the entire understanding and agreement between the parties hereto with respect to your Severance Benefits and the settlement of claims against the Company and cancels all previous oral and written negotiations, agreements, and commitments in connection therewith. Nothing in this Section 19, however, shall modify, cancel or supersede your obligations set forth in Section 5 above.

[Signature page follows.]

If you have any questions about the matters covered in this Agreement, please call **[INSERT NAME AND TELEPHONE NUMBER]**.

Very truly yours,

Kala Pharmaceuticals, Inc.

By:
[INSERT NAME]
[INSERT TITLE]

I hereby agree to the terms and conditions set forth above. I have been given at least twenty-one (21) days to consider this Agreement, and I have chosen to execute this on the date below. I intend that this Agreement will become a binding agreement between me and the Company if I do not revoke my acceptance in seven (7) days.

[INSERT EMPLOYEE NAME] Date

To be returned in a timely manner as set forth on the first page of this Agreement.

100 Beaver Street, Suite 201, Waltham, MA 02453 · Voice 781 996 5252 · Fax 781 642 0399 · www.kalarx.com

May 10, 2016

Dear Kim:

This letter agreement amends and restates in its entirety the letter agreement effective as of September 25, 2014 provided to you by Kala Pharmaceuticals, Inc., a Delaware corporation (the "Company") in connection with the continuation of your employment with the Company.

1. Position. You are employed to serve on a full-time basis as Chief Medical Officer. You are expected to devote at least five days per week and your best professional efforts to the performance of your duties and responsibilities for the Company and to abide by all Company policies and procedures as in effect from time to time. Although it is understood that you may continue to work remotely, you agree that you will travel to and work out of the Company's offices in Waltham, Massachusetts as often as and to the extent necessary to fulfill your duties and responsibilities, and/or as may be reasonably requested by the Company's Chief Executive Officer. You are expected to perform the duties of your position, together with such other duties as may reasonably be assigned to you from time to time, on the understanding that all assigned duties will be generally consistent with your position as Chief Medical Officer. Effective as of the date hereof, you shall report to the Company's Chief Executive Officer or, if the Company's Chief Executive Officer is any person — other than the current Chief Executive Officer — who is employed by the Company as of the date hereof, to such member or members of the Company's Board of Directors (the "Board") as the Board shall determine from time to time. Moreover, during your employment with the Company, you are expected to conduct your business activities at all times in accordance with the highest legal, ethical and professional standards. Nothing herein shall preclude you from (i) continuing to provide consulting services to or having an ownership interest in Acuity Advisors and/or (ii) providing consulting services to other corporations or entities with the prior written consent of the Company's Board; provided that the services you provide to any entities other than the Company (including, without limitation, Acuity Advisors) shall not: (x) conflict or materially interfere with the effective discharge of your duties and responsibilities to the Company, (y) be provided during the Company's regular business hours or on Company premises or using any of the Company's property or equipment, or (z) involve or relate to any project, research or other work that is within the scope of the Company's Field of Interest as defined in the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement described below and attached at Exhibit A hereto.

2. Base Salary. You will be paid on a bi-weekly basis at an annual base rate of $350,000.00, subject to tax and other withholdings as required by law, with salary to be paid in accordance with Company's standard payroll practices. Your base salary will be reviewed annually by the Compensation Committee of the Board.

3. Cash Bonus. Effective as of the date hereof, you will be eligible to earn a performance-based cash bonus with a target of 30% of your annual base salary. Payment of this performance-based bonus shall be based on written Company and personal objectives and criteria established by the Board. The performance-based bonus, if any, will be determined by the Board in its discretion, and will be paid annually after the first of the year

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(but in no event later than March 15), subject to you being employed with the Company on the preceding December 31st.

4. Benefits. You may participate in any and all benefit programs that the Company establishes and makes available to its employees from time to time, provided you are eligible under (and subject to all provisions of) the plan documents governing those programs. The benefit programs made available by the Company, and the rules, terms and conditions for participation in such programs, may be changed by the Company at any time without advance notice. Additionally, the Company will reimburse you for all actual, necessary and reasonable expenses you incur in the course of the Company's business, subject to the Company's expense policy as in effect from time to time and the terms of Exhibit B, attached hereto.

5. Vacation. You are eligible for a maximum of four weeks of vacation per calendar year commencing on your date of employment. The number of vacation days for which you are eligible shall accrue at the rate of 1.67 days per month that you are employed during such calendar year. Any unused vacation will be paid upon termination of your employment in accordance with the Company's annual vacation accrual policy.

6. Equity Compensation.

(a) Subject to approval by the Board and the closing of the Series C financing, the Company shall grant to you an incentive stock option (the "Option") under the Company's 2009 Employee, Director and Consultant Equity Incentive Plan (as amended to date, the "2009 Plan") for the purchase of that number of shares of the Company's common stock such that your total equity ownership, immediately following the grant, is equal to 1.4% of the total number of shares of the Company's common stock on a fully diluted basis, at a price per share equal to the fair market value at the time of Board approval, with 1/48th of the shares subject to the Option vesting each month after the date hereof, subject to your continuing employment with the Company. You may be eligible to receive such future stock option grants as the Board shall deem appropriate.

(b) All options and shares granted to you, at any time, that vest based solely on your continued service with the Company will immediately vest if, during your employment, a Change of Control (as defined below) occurs. In such event, one hundred percent (100%) of the options that vest based solely on your continued service with the Company and are not then vested, and which have not been exercised, cancelled or forfeited, shall become vested and exercisable in full as of the date of such Change of Control. The period for exercising such options shall be as set forth in the applicable stock option plan, certificate or agreement; provided, that the stock option agreement which documents your Option shall provide that the period for exercising your Option following a Termination Date (as such term is defined in such stock option agreement), to the extent then vested and exercisable, shall be six (6) months.

(c) If, after the date hereof, the Company terminates your employment without Cause (as defined below) or you voluntarily terminate your employment for Good Reason (as defined below), then the options and shares granted to you by the Company, at any time, that vest based solely on your continued service with the Company will immediately vest as to the portion of the applicable award that would have vested if your employment with the Company had continued for twelve (12) months following such termination. The period for exercising any options so accelerated shall be as set forth in the applicable stock option

plan, certificate or agreement; provided, that the stock option agreement which documents your Option shall provide that the period for exercising your Option following a Termination Date (as such term is defined in such stock option agreement), to the extent then vested and exercisable, shall be six (6) months.

(d) For purposes of this letter agreement, a "Change of Control" shall mean: (i) a merger or consolidation in which (A) the Company is a constituent party or (B) a subsidiary of the Company is a constituent party, and the Company issues shares of its capital stock pursuant to such merger or consolidation, except in the

case of either clause (A) or (B) any such merger or consolidation involving the Company or a subsidiary of the Company in which the beneficial owners of the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue beneficially to own, immediately following such merger or consolidation, at least a majority by voting power of the capital stock of (x) the surviving or resulting corporation or (y) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; (ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or a Company subsidiary of all or substantially all the assets of the Company and the Company subsidiaries taken as a whole (except in connection with a merger or consolidation not constituting a Change of Control under clause (i) or where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned Company subsidiary); or (iii) the sale or transfer, in a single transaction or series of related transactions, by the stockholders of the Company of more than 50% by voting power of the then-outstanding capital stock of the Company to any person or entity or group of affiliated persons or entities.

(e) For purposes of this letter agreement, "Good Reason" shall mean: (1) a material reduction in annual base salary, other than such a reduction that is proportionate to a reduction in salary of all executives of the Company generally; (2) a material breach by the Company of this letter agreement; (3) the relocation of your place of employment more than fifty (50) miles from your then current location without your express written consent; (4) the imposition of any requirement that you report to a Chief Executive Officer or any similar officer of the Company who is employed by the Company as of the date hereof, with the exception of the current Chief Executive Officer; or (5) a material reduction in your job duties, authority or responsibilities so as to constitute a de facto demotion (other than a change effected in connection with the integration of the operations of the Company into the operations of an acquirer in connection with a Change of Control); provided that none of the foregoing shall qualify as Good Reason unless, within ninety (90) days of the occurrence of the event you claim so qualifies, you shall have provided the Board with written notice specifying in detail the basis for such claim and a reasonable opportunity to cure the claimed Good Reason and the Company fails to cure such Good Reason within thirty (30) days of its receipt of your notice; provided further that no termination for Good Reason shall so qualify unless you shall terminate your employment at the Company no more than thirty (30) days following the expiration of the Company's cure period.

7. Severance.

(a) In the event that your employment is terminated by you for Good Reason or by the Company without Cause, you will receive severance pay of twelve (12) months of your annual base salary then in effect plus a pro-rated portion of any bonus attributable to the year of termination payable at the time that active employees receive their bonus payments for that year but in any event by March 15 of the year following the year of your termination, based on the Company's performance against previously established milestones, together with payment for the cost of up to twelve (12) months of COBRA premiums for continued health benefit coverage. All payments (other than the pro-rated portion of any bonus) will be made in a lump sum on the Payment Date (as defined below). The payments and benefits provided for in this Section 7(a) shall be subject to Exhibit B attached hereto.

(b) For purposes of this letter agreement, "Cause" shall mean: (a) commission of, or indictment or conviction of, any felony or any other crime involving dishonesty; (b) participation in any fraud, deliberate and substantial misconduct, breach of duty of loyalty or breach of fiduciary duty against the Company; (c) intentional and substantial damage to any property of the Company; (d) serious misconduct by you that in the good faith and reasonable judgment of the Company demonstrates gross unfitness to serve as Chief Medical Officer of the Company; (e) persistent, unsatisfactory job performance that remains uncured for at least sixty (60) days following written notice detailing the same from the Company; (f) your failure to secure and maintain work visas or other documentation sufficient to allow your service to the Company in the manner contemplated herein;

or (g) your breach of any material provision of this letter agreement or the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement referenced below and attached at Exhibit A, in either case, which breach (if capable of cure) remains uncured for a period of thirty (30) days after written notice to you from the Company. Termination of your employment for Cause will result in no severance pay. You will have fifteen (15) days from termination to exercise all then vested options.

(c) As a condition precedent to the receipt of any severance payments or the accelerated vesting of any options pursuant to this letter agreement or pursuant to any equity award agreement, you will be required to execute a separation agreement and general release of claims in favor of the Company, substantially similar to the form attached hereto as Exhibit C, and any revocation period applicable to such release must expire, within sixty (60) days following your date of termination (the date on which the revocation period expires, the "Payment Date"). Notwithstanding the foregoing, if the 60th day following your date of termination occurs in the calendar year following the year in which your termination occurs, then the Payment Date shall be no earlier than January 1 of such subsequent calendar year. In such circumstance, the Company will provide you with a general release of claims, said release to contain standard carve-outs for criminal and/or fraudulent conduct.

8. At-Will Employment. This letter agreement shall not be construed as an agreement, either expressed or implied, to employ you for any stated term, and shall in no way alter the Company's policy of employment at-will, under which both you and the Company remain free to terminate the employment relationship, with or without cause, at any time, with or without notice. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at-will" nature of your employment may only be changed by a written agreement approved by the Board and signed by you and the Company, which expressly states the intention to modify the at-will nature of your employment.

9. Arbitration and Equitable Relief. Should a dispute arise in connection with this letter agreement or your employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this letter agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this letter agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The arbitrator may grant injunctive or other relief in such dispute or controversy, including awarding attorneys' fees, filing fees and other costs to the prevailing party. The decision of the arbitrator, shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any

provision of applicable law notwithstanding, they will not request and the arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this Section 9 to the contrary, claims may be made in any Massachusetts court of competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any confidentiality, non-competition, non-solicitation or inventions assignment obligations of the other party.

10. Indemnification. You shall be entitled to corporate indemnification and insurance coverages to the same extent provided to other senior officers and directors of the Company.

11. Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement. As a condition of your continued employment with the Company, you will be required to sign the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement attached hereto at Exhibit A.

12. Miscellaneous.

(a) You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing (or that purports to prevent) you from being employed by or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this letter agreement.

(b) You were required to execute authorizations for the Company to obtain consumer reports and/or investigative consumer reports and use them in conducting background checks as a condition to your employment. The Company may obtain background reports from time to time during your continued employment with the Company, as necessary.

(c) You represent that you have disclosed to the Company any and all agreements relating to your prior employment that may have affected your eligibility to be employed by the Company or limited the manner in which you may be employed. It is the Company's understanding that any such agreements did not and will not prevent you from performing the duties of your position, and you represent that such was and is the case. You did not to bring any third party confidential information to the Company, including that of your former employer, and covenant that in performing your duties for the Company you have not in any utilized and will not in any way utilize any such information.

(d) As an employee of the Company, you are required to comply with all Company policies and procedures. Violations of the Company's policies may lead to immediate termination of your employment. Further, the Company's premises, including all workspaces, furniture, documents, and other tangible materials, and all information technology resources of the Company (including computers, data and other electronic files, and all internet and email) are subject to oversight and inspection by the Company at any time. Company employees should have no expectation of privacy with regard to any Company premises, materials, resources, or information.

(e) Notices. Any notices from one party to the other will be in writing and will be given by addressing the same to the other at the address set forth in this letter agreement. Notices to the Company will be marked "Board of Directors". Notice will be deemed to have been duly given when (a) deposited in the United States mail with proper postage for first class registered or certified mail, return receipt requested, (b) sent by any reputable commercial courier or (c) delivered personally.

(f) Assignment. All of the terms and provisions of this letter agreement shall be binding on and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives successor and assigns of the parties hereto (including, in the case of the Company, any acquiror), except that your duties and responsibilities under this letter agreement are of a personal nature and shall not be assignable or delegable in whole or in part by you.

(g) Modification; Amendment. This letter agreement may not be modified or amended except by a written agreement signed by you and an authorized representative of the Company.

(h) Entire Agreement. This letter agreement is your formal offer of continued employment and supersedes any and all prior or contemporaneous agreements, discussions and understandings, whether written or oral, relating to the subject matter of this letter agreement or your employment with the Company.

(i) Governing Law. This letter agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws

(j) Counterparts. This letter agreement may be executed in any number of counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

If this letter agreement correctly sets forth the terms under which you will continue to be employed by the Company, effective as of the date hereof, please sign the enclosed duplicates of this letter agreement and Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement and return them to me via email with originals to follow.

[Signature page follows.]

Very truly yours,

KALA PHARMACEUTICALS, INC.

By: /s/ Mark Iwicki
Name: Mark Iwicki
Title: Chairman and CEO

The foregoing correctly sets forth the terms under which I will continue to be employed by the Company, effective as of the date hereof. I am not relying on any representations other than those set form above:

By: /s/ R. K. Brazzell — 10 May 2016
Name: R. K. Brazzell — Date

Enclosures (5)
Duplicate Original Letter Agreement
Exhibit A: Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement
Duplicate Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement
Exhibit B: Payments Subject to Section 409A
Exhibit C: Form of Separation and Release Agreement

EXHIBIT A

NON-COMPETITION, NON-SOLICITATION, CONFIDENTIALITY AND ASSIGNMENT OF INVENTIONS AGREEMENT

KALA PHARMACEUTICALS, INC.

7 June, 2016

Dr. R. K. Brazzell
514 West Short St. #101
Lexington, KY 40507

Dear Kim:

This letter is to confirm our understanding with respect to (i) your agreement not to compete with Kala Pharmaceuticals, Inc. or any present or future parent, subsidiary or affiliate thereof (collectively, the "Company"), (ii) your agreement not to solicit certain employees, consultants, customers and business partners of the Company, (iii) your agreement to protect and preserve information and property which is confidential and proprietary to the Company and (iv) your agreement with respect to the ownership of inventions, ideas, copyrights, patents, trademarks or other intellectual property which may be used in the business of the Company (the terms and conditions agreed to in this letter are hereinafter referred to as the "Agreement").

In consideration of and as a condition of your continued employment with the Company, and in consideration of the additional compensation and other benefits reflected in the April [X], 2016 offer letter to which this Agreement is attached at Exhibit A, and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, we have agreed as follows:

1. Prohibited Competition.

(a) Certain Acknowledgements and Agreements.

(i) We have discussed, and you recognize and acknowledge, the competitive and proprietary aspects of the business of the Company.

(ii) You further recognize and acknowledge the competitive and proprietary nature of the Company's business operations. You acknowledge and agree that a business will be deemed competitive with the Company if it engages in a line of business in which it performs or plans to perform any of the services, or researches, produces, develops, manufactures, licenses, distributes or sells any products or services, provided or offered by the Company, or if it performs any other services and/or engages in the production, research, development,

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manufacture, license, distribution or sale of any service or product similar to the Company's services or products, which services or products were performed, produced, researched, developed, manufactured, licensed, distributed, sold or provided, or planned to be performed, produced, researched, developed, manufactured, licensed, distributed, sold or provided, by the Company during your employment by the Company, or which services or products were designed to perform the same function or achieve the same results as any of the foregoing, whether or not similar, in the Company's Field of Interest.

(iii) You understand and acknowledge that the term "Company's Field of Interest" currently means the actual or planned research, production, development, manufacture, licensing, distribution, sale or use of (x) products for the treatment of Dry Eye Disease, Ocular Post Surgical Inflammation, Meibomian Gland Disease, Age-Related Macular Degeneration, Diabetic Macular Edema, Retinal Vein Occlusion, Corneal Neovascularization and other related conditions, (y) anti-inflammatory agents and Kinase Inhibitors, and (z) microparticle and nanoparticle technologies for delivering pharmaceutical agents (including, without limitation, microparticles and nanoparticles for use in delivering therapeutic or prophylactic agents to or through mucus, mucin, or mucosal barriers or tissues in humans). You further acknowledge and agree that the actual or planned business of the Company may change over the course of your employment and that, notwithstanding the foregoing, the term "Company's Field of Interest" shall include any and all services, products or technologies performed, produced, researched, developed,

manufactured, licensed, distributed, sold or provided, or planned to be performed, produced, researched, developed, manufactured, licensed, distributed, sold or provided, by the Company at any time during your employment.

(iv) You further acknowledge that, during the course of your performing services for the Company, the Company will furnish, disclose or make available to you Confidential Information (as defined below) related to the Company's business and that the Company may provide you with unique and specialized training. You also acknowledge that such Confidential Information and such training have been developed and will be developed by the Company through the expenditure by the Company of substantial time, effort and money and that all such Confidential Information and training could be used by you to compete with the Company. You also acknowledge that if you become employed or affiliated with any competitor of the Company in violation of your obligations in this Agreement, it is inevitable that you would disclose the Confidential Information to such competitor and would use such Confidential Information, knowingly or unknowingly, on behalf of such competitor. Further, in the course of your employment, you will be introduced to customers and others with important relationships to the Company. You acknowledge that any and all "goodwill" created through such introductions belongs exclusively to the Company, including, without limitation, any goodwill created as a result of direct

or indirect contacts or relationships between you and any customers of the Company.

(v) For purposes of this Agreement, "Confidential Information" means confidential, secret and proprietary information and know-how of the Company, whether in written, oral, electronic or other form, including but not limited to, information and facts concerning business plans, customers, future customers, suppliers, licensors, licensees, partners, investors, affiliates or others, training methods and materials, financial information, sales prospects, client lists, inventions, or any other scientific, technical or trade secrets of the Company or of any third party provided to you or the Company under a condition of confidentiality, provided that Confidential Information will not include information that is in the public domain other than through any fault or act by you. The term "trade secrets," as used in this Agreement, will be given its broadest possible interpretation under the law of the Commonwealth of Massachusetts and will include, without limitation, anything tangible or intangible or electronically kept or stored, which constitutes, represents, evidences or records, any secret scientific, technical, merchandising, production or management information, or any design, process, procedure, formula, invention, improvement or other confidential or proprietary information or documents.

(b) Non-Competition. During the period in which you perform services for or at the request of the Company and for a period of twelve (12) months following the termination of your performance of services for or at the request of the Company for any reason or for no reason you will not, without the prior written consent of the Company:

(i) For yourself or on behalf of any other, directly or indirectly, either as principal, agent, stockholder, employee, consultant, representative, owner, officer, director, investor, lender or in any other capacity, own, manage, operate or control, or be concerned, connected or employed by, or otherwise associate in any manner with, engage in or have a financial interest in, any business or enterprise in the Company's Field of Interest anywhere in the world, except that nothing contained herein shall preclude you from purchasing stock in any such business or enterprise if such stock is publicly traded, and provided that your holdings do not exceed one percent (1%) percent of the issued and outstanding capital stock of such business or enterprise; or

(ii) Either individually or on behalf of or through any third party, directly or indirectly, solicit, divert or appropriate or attempt to solicit, divert or appropriate any actual or prospective clients, customers, accounts or business partners of the Company which were contacted, solicited or served by the Company during your employment with the Company; or

(iii) Either individually or on behalf of or through any third party, directly or indirectly, interfere with, or attempt to interfere with, the relations between the Company and any vendor or supplier to the Company.

(c) Non-Solicitation. During the period in which you perform services for or at the request of the Company and for a period of twelve (12) months following the termination of your performance of services for or at the request of the Company for any reason or for no reason you will not, without the prior written consent of the Company:

(i) Either individually or on behalf of or through any third party, directly or indirectly, (A) solicit, entice or persuade or attempt to solicit, entice or persuade any other employees of or consultants to the Company to leave the services of the Company for any reason, or (B) employ or engage, cause to be employed or engaged, or solicit the employment or engagement of any employee of or consultant to the Company while any such person is providing services to the Company or within six months after any such person ceases providing services to the Company (provided, however, that nothing in this subsection (i)(B) with respect to consultants is intended to prevent you from engaging or soliciting consultants who are key opinion leaders to provide services to other businesses or enterprises that are not in the Company's Field of Interest, as long as you do not do so in violation of any of your other obligations under this Agreement); or

(ii) Either individually or on behalf of or through any third party, directly or indirectly, interfere with, or attempt to interfere with, the relations between any other employees of or consultants to the Company and the Company.

(d) Reasonableness of Restrictions. You further recognize and acknowledge that (i) the types of employment which are prohibited by this Section 1 are narrow and reasonable in relation to the skills which represent your principal salable asset both to the Company and to your other prospective employers and (ii) the specific but broad geographical scope of the provisions of this Section 1 is reasonable, legitimate and fair to you in light of the Company's need to market its services and sell its products in a large geographic area in order to have a sufficient customer base to make the Company's business profitable and in light of the limited restrictions on the type of employment prohibited herein compared to the types of employment for which you are qualified to earn your livelihood.

(e) Survival of Acknowledgements and Agreements; Extension. Your acknowledgements and agreements set forth in this Section 1 will survive the termination of your provision of services to the Company for any reason or for no reason. If you violate any of the provisions set forth in this Section 1, you shall continue to be bound by the restrictions set forth in this Section 1 until a period of twelve (12) months has expired without any violation of such provisions.

2. Protected Information. You will at all times, both during the period while you are performing services for the Company and after the termination of your provision of services to the Company for any reason or for no reason, maintain in confidence, and without the prior written consent of the Company, you will not use, except in the course of performance of your duties for the Company or by court order, disclose or give to others, any Confidential Information. In the event you are questioned by anyone not employed by the Company or by an employee of or a consultant to the Company not authorized to receive Confidential Information,

in regard to any Confidential Information, or concerning any fact or circumstance relating thereto, you will promptly notify the Company. Upon the termination of your provision of services to the Company for any reason or for no reason, or if the Company otherwise requests, (i) you will return to the Company all tangible Confidential Information and copies thereof (regardless how such Confidential Information or copies are maintained) and (ii) you will deliver to the Company any property of the Company which may be in your possession, including products, materials, memoranda, notes, records, reports, or other documents or photocopies of the same. The terms of this Section 2 are in addition to, and not in lieu of, any statutory or other contractual or legal obligation that you may have relating to the protection of the Company's Confidential Information. The terms of this Section 2 will survive indefinitely any termination of your provision of services to the Company for any reason or for no reason.

3. Ownership of Ideas, Copyrights and Patents.

(a) Property of the Company. All ideas, discoveries, creations, manuscripts and properties, innovations, improvements, enhancements, processes, know-how, inventions, designs, developments, apparatus, techniques, methods, laboratory notebooks, software, works of authorship and formulae which may be used in the business of the Company, whether patentable, copyrightable or not, which you may conceive, reduce to practice or develop during the period while you are performing services for the Company and for one (1) year thereafter, alone or in conjunction with another or others, whether during or out of regular business hours, whether or not on the Company's premises or with the use of its equipment, and whether at the request or upon the suggestion of the Company or otherwise (all of which are collectively referred to herein as "Inventions"), will be the sole and exclusive property of the Company. You agree not to publish any of the Inventions without the prior written consent of the Company or its designee. Without limiting the foregoing, you also acknowledge that all original works of authorship which are made by you (solely or jointly with others) within the scope of your employment or which relate to the business of the Company or a Company affiliate and which are protectable by copyright are "works made for hire" pursuant to the United States Copyright Act (17 U.S.C. Section 101). You hereby assign to the Company or its designee all of your right, title and interest in and to all Inventions and all related patents, patent applications, copyrights and copyright applications. You further represent that, to the best of your knowledge and belief, none of the Inventions will violate or infringe upon any right, patent, copyright, trademark or right of privacy, or constitute libel or slander against or violate any other rights, of any person, firm or corporation, and that you will use your best efforts to prevent any such violation.

(b) Cooperation. At any time during or after the period during which you are performing services for the Company, you will fully cooperate with the Company and its attorneys and agents in the preparation and filing of all papers and other documents as may be required to protect the Company's rights and interests in and to any of such Inventions, such papers and documents to include, without limitation, any copyright applications, patent applications, trademark applications, declarations, oaths, formal assignments, assignments of priority rights, and powers of attorney with respect to any such Inventions, and such full cooperation to include, without limitation, joining in any proceeding to obtain letters patent, copyrights, trademarks or other legal rights, in each

case, in the United States and in any and all other countries, provided that the Company will bear the expense of such preparations and filings, and that any copyright, patent or other legal or intellectual property rights so issued to you personally will be assigned by you to the Company or its designee without charge by you. You further agree that if the Company is unable, after reasonable effort, to secure your signature on any such papers or documents, any executive officer of the Company shall be entitled to execute any such papers or documents as your agent and attorney-in-fact, and you hereby irrevocably designate and appoint each executive officer of the Company as your agent and attorney-in-fact to execute any such papers or documents on your behalf, and to take any and all actions as the Company may deem necessary or desirable in order to protect its rights and interests in any Inventions, under the conditions described in this sentence.

(c) Licensing and Use of Innovations. With respect to any ideas, discoveries, creations, manuscripts and properties, innovations, improvements, enhancements, processes, know-how, inventions, designs, developments, apparatus, techniques, methods, laboratory notebooks, software, works of authorship and formulae, and works of any similar nature (from any source), which you conceived, reduced to practice or developed prior to performing services for the Company, but which you provide to the Company or incorporate in any Company product or system (all of which are collectively referred to herein as "Innovations"), you hereby grant to the Company a royalty-free, fully paid-up, non-exclusive, perpetual and irrevocable license throughout the world to use, modify, create derivative works from, disclose, publish, translate, reproduce, deliver, perform, dispose of, and to authorize others so to do, all such Innovations. You will not include in any Innovations you deliver to the Company or use on its behalf, without the prior written approval of the Company, any material which is or will be patented, copyrighted or trademarked by you or others unless you provide the Company with the written permission of the holder of any patent, copyright or trademark owner for the Company to use such material in a manner consistent with then-current Company policy.

(d) Prior Inventions. Listed on Exhibit 3(d) to this Agreement are any and all Innovations in which you claim or intend to claim any right, title and interest, including, without limitation, patent, copyright or trademark interests which, to the best of your knowledge, will be or may be delivered to the Company in the course of your employment or incorporated into any Company product or system. You acknowledge that your obligation to disclose such information is ongoing during the period that you provide services to the Company.

4. Disclosure to Future Employers. You agree that you will provide, and that the Company, in its discretion, may similarly provide, a copy of the covenants contained in Sections 1, 2 and 3 of this Agreement to any business or enterprise which you may directly or indirectly own, manage, operate, finance, join, control or in which you may participate in the ownership, management, operation, financing, or control, or with which you may be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise.

5. No Conflicting Agreements. You hereby represent and warrant that you have no commitments or obligations inconsistent with this Agreement and you will indemnify and hold the Company harmless against any and all losses, damages, liabilities or expenses arising from

any claim based upon circumstances alleged to be inconsistent with such representation and warranty.

6. Name & Likeness Rights. You hereby authorize the Company to use, reuse, and to grant others the right to use and reuse, your name, photograph, likeness (including caricature), voice, and biographical information, and any reproduction or simulation thereof, in any form of media or technology now known or hereafter developed (including, but not limited to, film, video and digital or other electronic media), both during and after your employment, for whatever purposes the Company deems necessary.

7. General.

(a) Notices. All notices, requests, consents and other communications hereunder will be in writing, will be addressed to the receiving party's address set forth above or to such other address as a party may designate by notice hereunder, and will be either (i) delivered by hand, (ii) sent by overnight courier, or (iii) sent by registered mail, return receipt requested, postage prepaid. All notices, requests, consents and other communications hereunder will be deemed to have been given either (i) if by hand, at the time of the delivery thereof to the receiving party at the address of such party set forth above, (ii) if sent by overnight courier, on the next business day following the day such notice is delivered to the courier service, or (iii) if sent by registered mail, on the fifth business day following the day such mailing is made.

(b) Entire Agreement. This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement will affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(c) Modifications and Amendments. The terms and provisions of this Agreement may be modified or amended only by written agreement executed by the parties hereto.

(d) Waivers and Consents. The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent will be deemed to be or will constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent will be effective only in the specific instance and for the purpose for which it was given, and will not constitute a continuing waiver or consent.

(e) Assignment. The Company may assign its rights and obligations hereunder to any person or entity that succeeds to all or substantially all of the Company's business or assets or any corporation with which, or into which, the Company may be merged. You may not assign your rights and obligations under this Agreement

without the prior written consent of the Company, and any such attempted assignment by you without the prior written consent of the Company will be void.

(f) Benefit. All statements, representations, warranties, covenants and agreements in this Agreement will be binding on the parties hereto and will inure to the benefit of the respective successors and permitted assigns of each party hereto. Nothing in this Agreement will be construed to create any rights or obligations except between the Company and you, and no person or entity other than the Company will be regarded as a third-party beneficiary of this Agreement.

(g) Governing Law. This Agreement and the rights and obligations of the parties hereunder will be construed in accordance with and governed by the laws of the Commonwealth of Massachusetts, without giving effect to the conflict of law principles thereof.

(h) Jurisdiction, Venue and Service of Process. Any legal action or proceeding with respect to this Agreement will be brought in the courts of the Commonwealth of Massachusetts or of the United States of America for the District of Massachusetts. By execution and delivery of this Agreement, each of the parties hereto accepts for itself and in respect of its property, generally and unconditionally, the exclusive jurisdiction of the aforesaid courts.

(i) WAIVER OF JURY TRIAL. ANY ACTION, DEMAND, CLAIM OR COUNTERCLAIM ARISING UNDER OR RELATING TO THIS AGREEMENT WILL BE RESOLVED BY A JUDGE ALONE AND EACH OF THE COMPANY AND YOU WAIVE ANY RIGHT TO A JURY TRIAL THEREOF.

(j) Severability. The parties intend this Agreement to be enforced as written. However, (i) if any portion or provision of this Agreement is to any extent declared illegal or unenforceable by a duly authorized court having jurisdiction, then the remainder of this Agreement, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, will not be affected thereby, and each portion and provision of this Agreement will be valid and enforceable to the fullest extent permitted by law and (ii) if any provision, or part thereof, is held to be unenforceable because of the duration of such provision or the geographic area covered thereby, the court making such determination will have the power to reduce the duration and/or geographic area of such provision, and/or to delete specific words and phrases ("blue-penciling"), and in its reduced or blue-penciled form such provision will then be enforceable and will be enforced.

(k) Headings and Captions. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and will in no way modify or affect the meaning or construction of any of the terms or provisions hereof.

(l) Injunctive Relief. You hereby expressly acknowledge that any breach or threatened breach of any of the terms and/or conditions set forth in Section 1, 2 or 3 of this Agreement will result in substantial, continuing and irreparable injury to the

Company. Therefore, in addition to any other remedy that may be available to the Company, the Company will be entitled to injunctive or other equitable relief by a court of appropriate jurisdiction in the event of any breach or threatened breach of the terms of Section 1, 2 or 3 of this Agreement.

(m) No Waiver of Rights, Powers and Remedies. No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, will operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, will preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto will not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement will entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(n) Not Employment Contract. You acknowledge that this Agreement does not constitute a contract of employment, does not imply that the Company will continue your employment for any period of time and does not change the at-will nature of your employment.

(o) Counterparts. This Agreement may be executed in two or more counterparts, and by different parties hereto on separate counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

(p) Opportunity to Review. You hereby acknowledge that you have had adequate opportunity to review these terms and conditions and to reflect upon and consider the terms and conditions of this Agreement, and that you have had the opportunity to consult with counsel of your own choosing regarding such terms. You further acknowledge that you fully understand the terms of this Agreement and have voluntarily executed this Agreement.

[Remainder of page intentionally left blank.]

If the foregoing accurately sets forth our agreement, please so indicate by signing and returning to us the enclosed copy of this letter.

Very truly yours,

KALA PHARMACEUTICALS, INC.

By: /s/ Mark Iwicki
Name: Mark Iwicki
Title: Chairman and CEO

Accepted and Approved:

R.K. Brazzell — 7 June 2016
Name:R.K. Brazzell — Date

EXHIBIT 3(d)

PRIOR INVENTIONS

[None.]

EXHIBIT B

Payments Subject to Section 409A

13. Subject to this Exhibit B, any severance payments that may be due under the letter agreement shall begin only upon the date of your "separation from service" (determined as set forth below) which occurs on or after the termination of your employment. The following rules shall apply with respect to distribution of the severance payments, if any, to be provided to you under the letter agreement, as applicable:

(a) It is intended that each installment of the severance payments under the letter agreement provided under shall be treated as a separate "payment" for purposes of Section 409A. Neither the Company nor you shall have the right to accelerate or defer the delivery of any such payments except to the extent specifically permitted or required by Section 409A.

(b) If, as of the date of your "separation from service" from the Company, you are not a "specified employee" (within the meaning of Section 409A), then each installment of the severance payments shall be made on the dates and terms set forth in the letter agreement.

(c) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of Section 409A), then:

Each installment of the severance payments due under the letter agreement that, in accordance with the dates and terms set forth herein, will in all circumstances, regardless of when your separation from service occurs, be paid within the short-term deferral period (as defined under Section 409A) shall be treated as a short-term deferral within the meaning of Treasury Regulation Section 1.409A-1(b)(4) to the maximum extent permissible under Section 409A and shall be paid on the dates and terms set forth in the letter agreement; and

Each installment of the severance payments due under the letter agreement that is not described in this Exhibit B, Section 1(c)(i) and that would, absent this subsection, be paid within the six-month period following your "separation from service" from the Company shall not be paid until the date that is six months and

one day after such separation from service (or, if earlier, your death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six months and one day following your separation from service and any subsequent installments, if any, being paid in accordance with the dates and terms set forth herein; provided, however, that the preceding provisions of this sentence shall not apply to any installment of payments if and to the maximum extent that that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of your second taxable year following the taxable year in which the separation from service occurs.

14. The determination of whether and when your separation from service from the Company has occurred shall be made and in a manner consistent with, and based on the presumptions set forth in, Treasury Regulation Section 1.409A-1(h). Solely for purposes of this Exhibit B, Section 2, "Company" shall include all persons with whom the Company would be considered a single employer under Section 414(b) and 414(c) of the Code.

15. All reimbursements and in-kind benefits provided under this letter agreement shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this letter agreement),

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(ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.

16. The Company makes no representation or warranty and shall have no liability to you or to any other person if any of the provisions of the letter agreement (including this Exhibit) are determined to constitute deferred compensation subject to Section 409A but that do not satisfy an exemption from, or the conditions of, that section.

Exhibit C

Form of Separation and Release Agreement

[KALA LETTERHEAD]

BY [METHOD OF DELIVERY]

[INSERT DATE]

[INSERT EMPLOYEE NAME]
[INSERT EMPLOYEE ADDRESS]

Dear **[INSERT EMPLOYEE NAME]**:

The purpose of this letter agreement is to confirm the terms regarding your separation of employment from Kala Pharmaceuticals, Inc. (the "Company"), effective **[INSERT SEPARATION DATE]**. The Company will provide you with the severance benefits described in Section 2 below if you sign and return this letter agreement (the "Agreement") to the Company by **[Insert Return Date — *At least 21 days after agreement is received by the employee* (but no earlier than the Separation Date)]** and it becomes binding between you and the Company. By signing and returning this Agreement and not revoking your acceptance, you will be entering into a binding agreement with the Company and will be agreeing to the terms and conditions set forth in the numbered paragraphs below, including the release of claims set forth in Section 3. Therefore, you are advised to consult with an attorney before signing this Agreement and you have been given at least twenty-one (21) days to do so. If you sign this Agreement, you may change your mind and revoke your agreement during the seven (7) day period after you have signed it by notifying me in writing. If you do not so revoke, this Agreement will become a binding agreement between you and the Company upon the expiration of the seven (7) day period.

If you choose not to sign and return this Agreement by **[Insert Return Date - Same as Above]** or if you timely revoke your acceptance in writing, you shall not receive any severance benefits from the Company. You will, however, receive payment on your Separation Date, as defined below, for your final wages and any unused vacation time accrued through the Separation Date. You may also, if eligible, elect to continue receiving group medical insurance pursuant to the federal "COBRA" law, 29 U.S.C. § 1161 et seq. Please consult the COBRA materials to be provided by the Company under separate cover for details regarding these benefits. Further, pursuant to the Company's 2009 Employee, Director and Consultant Equity Incentive Plan (as amended to date, the "2009 Plan"), you will have up to six months after the Separation Date to exercise any vested stock options you may have (as provided for by the 2009 Plan subject to the terms of the letter agreement between you and the Company dated April [ ], 2016 (the "2016 Letter Agreement"). All unvested stock options will be cancelled on the Separation Date.

The following numbered paragraphs set forth the terms and conditions that will apply if you timely sign and return this Agreement.

1. **Separation Date**. Your effective date of separation from the Company is **[INSERT SEPARATION DATE](1)** (the "Separation Date"). As of the Separation Date, all salary payments from

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(1) Please note that, if the Separation Date is after the date of this Agreement, the Agreement will need to be modified, as certain return dates will change.

the Company will cease and any benefits you had as of the Separation Date under Company-provided benefit plans, programs, or practices will terminate, except as required by federal or state law.

2. **Description of Severance Benefits**. If you timely sign and return this Agreement and do not revoke your acceptance, the Company will provide the following severance benefits set forth in the 2016 Letter Agreement as amended from time to time, between you and the Company (the "Severance Benefits"). You will not be eligible for, nor shall you have a right to receive, any payments or benefits from the Company following the Separation Date other than as described herein and in the 2016 Letter Agreement.

3. **Representation on Action**. You represent that you have not filed or reported any complaints, claims or actions against any of the Released Parties with any state, federal or local agency or court.

4. **Release**. In consideration of the Severance Benefits, which you acknowledge you would not otherwise be entitled to receive, you hereby fully, forever, irrevocably and unconditionally release, remise and discharge the Company, its affiliates, subsidiaries, parent companies, predecessors, and successors, and all of their respective past and present officers, directors, stockholders, partners, members, employees, agents, representatives, plan administrators, attorneys, insurers and fiduciaries (each in their individual and corporate capacities) (collectively, the "Released Parties") from any and all claims, charges, complaints, demands, actions, causes of action, suits, rights, debts, sums of money, costs, accounts, reckonings, covenants, contracts, agreements, promises, doings, omissions, damages, executions, obligations, liabilities, and expenses (including attorneys' fees and costs), of every kind and nature that you ever had or now have against any or all of the Released Parties, including, but not limited to, any and all claims arising out of or relating to your periods of employment with and/or separations from the Company, including, but not limited to, all claims under Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq., the Americans With Disabilities Act of 1990, the Age Discrimination in Employment Act, 29 U.S.C. § 621 et seq., 42 U.S.C. § 12101 et seq., the Genetic Information Nondiscrimination Act of 2008, 42 U.S.C. § 2000ff et seq., the Family and Medical Leave Act, 29 U.S.C. § 2601 et seq., the Worker Adjustment and Retraining Notification Act ("WARN"), 29 U.S.C. § 2101 et seq., the Rehabilitation Act of 1973, 29 U.S.C. § 701 et seq., Executive Order 11246, Executive Order 11141, the Fair Credit Reporting Act, 15 U.S.C. § 1681 et seq., and the Employee Retirement Income Security Act of 1974 ("ERISA"), 29 U.S.C. § 1001 et seq., all as amended; all claims arising out of the Massachusetts Fair Employment Practices Act., M.G.L. c. 151B, § 1 et seq., the Massachusetts Wage Act, Mass. Gen. Laws ch. 149, § 148 et seq. (Massachusetts law regarding payment of wages and overtime), the Massachusetts Civil Rights Act, M.G.L. c. 12, §§ 11H and 11I, the Massachusetts Equal Rights Act, M.G.L. c. 93, § 102 et seq. and M.G.L. c. 214, § 1C, the Massachusetts Small Necessities Leave Act, M.G.L. c. 149, § 52D, the Massachusetts Equal Pay Law, M.G.L. c. 149, § 105A et seq., the Massachusetts Maternity Leave Act, M.G.L. c. 149, § 105D, and the Massachusetts Privacy Act, M.G.L. c. 214, § 1B, all as amended; all claims arising out of the Kentucky Fair Employment Practices Act, Ky. Rev. Stat. Ann. § 344.010 et seq., the 1976 Kentucky Equal Opportunities Act, Ky. Rev. Stat. Ann. § 207.130 et seq., Ky. Rev. Stat. Ann. § 337.420 et seq. (Kentucky equal pay law), Ky. Rev. Stat. Ann. § 337.015 (Kentucky adoption leave law), and Ky. Rev. Stat. Ann. §§ 207.170, 337.990(9), 338.121 (Kentucky whistleblower protection laws), all as amended; all common law claims including, but not limited to, actions in

defamation, intentional infliction of emotional distress, misrepresentation, fraud, wrongful discharge, and breach of contract (including, without limitation, all claims arising out of or related to the 2016 Letter Agreement); all federal and state whistleblower claims to the extent permitted by law; all claims to any non-vested ownership interest in the Company, contractual or otherwise, and any claim or damage arising out of your periods of employment with and/or separation from the Company (including a claim for retaliation) under any common law theory or any federal, state or local statute or ordinance not expressly referenced above; provided, however, that nothing in this Agreement prevents you from filing a charge with, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission or a state fair employment practices agency (except that you acknowledge that you may not recover any monetary benefits in connection with any such claim, charge or proceeding and you further waive any rights or claims to any payment, benefit, attorneys' fees or other remedial relief in connection with any such claim, charge or proceeding).

5. **Post-Separation Obligations**. You acknowledge and reaffirm your obligation to keep confidential and not to disclose any and all non-public information concerning the Company that you acquired during the course of your periods of employment with the Company, including, but not limited to, any non-public information concerning the Company's business affairs, business prospects, and financial condition. You further acknowledge and reaffirm your obligations under the Non-Competition, Non-Solicitation, Confidentiality and Assignment of Inventions Agreement you previously executed for the benefit of the Company, which remains in full force and effect.

6. **Non-Disparagement**. You understand and agree that, in consideration of the Severance Benefits, you shall not make any false, disparaging or derogatory statements to any person or entity, including, without limitation, any media outlet, industry group, financial institution or current or former employee, consultant, client or customer of the Company, regarding the Company or any of its directors, officers, employees, agents or representatives or about the Company's business affairs or financial condition; provided, however, that nothing herein shall be construed as preventing you from making truthful disclosures to any governmental entity or in any litigation or arbitration.

7. **Cooperation**. To the extent permitted by law, you agree to cooperate fully with the Company in the defense or prosecution of any claims or actions which already have been brought, are currently pending, or which may be brought in the future against or on behalf of the Company, whether before a state or federal court, any state or federal government agency, or a mediator or arbitrator. Your full cooperation in connection with such claims or actions shall include, but not be limited to, being available to meet with counsel to prepare its claims or defenses, to prepare for trial or discovery or an administrative hearing or a mediation or arbitration and to act as a witness when requested by the Company at reasonable times designated by the Company. You agree that you will notify the Company promptly in the event that you are served with a subpoena or in the event that you are asked to provide a third party with information concerning any actual or potential complaint or claim against the Company.

8. **Return of Company Property**. You represent and confirm that you have returned to the Company all Company-owned property in your possession, custody or control, including, without limitation, all keys, files, documents and records (and copies thereof), equipment (including, but not limited to, computer hardware, software and printers, wireless handheld devices, cellular phones, pagers, etc.), Company identification and Company vehicles, and that you have left intact all electronic Company documents, including, without limitation, those that you developed or helped to develop

during your employment. You further confirm that you have cancelled all accounts for your benefit, if any, in the Company's name, including, without limitation, credit cards, telephone charge cards, cellular phone and/or pager accounts, and computer accounts.

9. **Business Expenses and Final Compensation**. You acknowledge that you have been reimbursed by the Company for all business expenses incurred in conjunction with the performance of your employment and that no other reimbursements are owed to you. You further acknowledge that you have

received payment in full for all services rendered in conjunction with your periods of employment by the Company, including, without limitation, payment for all wages, bonuses, equity, commissions and accrued, unused vacation time, and that no other compensation is owed to you except as provided herein.

10. **Amendment and Waiver**. This Agreement shall be binding upon the parties and may not be modified in any manner, except by an instrument in writing of concurrent or subsequent date signed by duly authorized representatives of the parties hereto. This Agreement is binding upon and shall inure to the benefit of the parties and their respective agents, assigns, heirs, executors, successors and administrators. No delay or omission by the Company in exercising any right under this Agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar to or waiver of any right on any other occasion.

11. **Validity**. Should any provision of this Agreement be declared or be determined by any court of competent jurisdiction to be illegal or invalid, the validity of the remaining parts, terms or provisions shall not be affected thereby and said illegal or invalid part, term or provision shall be deemed not to be a part of this Agreement.

12. **Confidentiality**. To the extent permitted by law, you understand and agree that as a condition of the Severance Benefits herein described, the terms and contents of this Agreement, and the contents of the negotiations and discussions resulting in this Agreement, shall be maintained as confidential by you and your agents and representatives and shall not be disclosed except to the extent required by federal or state law or as otherwise agreed to in writing by the Company, provided, however, that nothing herein shall prevent you from making truthful disclosures to any governmental entity or in any litigation or arbitration.

13. **Tax Provision**. In connection with the Severance Benefits to be provided to you pursuant to this Agreement, the Company shall withhold and remit to the tax authorities the amounts required under applicable law, and you shall be responsible for all applicable taxes with respect to such Severance Benefits under applicable law. You acknowledge that you are not relying upon advice or representation of the Company with respect to the tax treatment of any of the Severance Benefits.

14. **Nature of Agreement**. You understand and agree that this Agreement is a severance agreement and does not constitute an admission of liability or wrongdoing on the part of the Company.

15. **Acknowledgments**. You acknowledge that you have been given at least twenty-one (21) days to consider this Agreement, and that the Company is hereby advising you to consult with an attorney of your own choosing prior to signing this Agreement. You understand that you may revoke this Agreement for a period of seven (7) days after you sign this Agreement by notifying me in writing,

and the Agreement shall not be effective or enforceable until the expiration of this seven (7) day revocation period. You understand and agree that by entering into this Agreement, you are waiving any and all rights or claims you might have under the Age Discrimination in Employment Act, as amended by the Older Workers Benefit Protection Act, and that you have received consideration beyond that to which you were previously entitled.

16. **Voluntary Assent**. You affirm that no other promises or agreements of any kind have been made to or with you by any person or entity whatsoever to cause you to sign this Agreement, and that you fully understand the meaning and intent of this Agreement. You state and represent that you have had an opportunity to fully discuss and review the terms of this Agreement with an attorney. You further state and represent that you have carefully read this Agreement, understand the contents herein, freely and voluntarily assent to all of the terms and conditions hereof, and sign your name of your own free act.

17. **Arbitration and Equitable Relief**. Should a dispute arise in connection with, relating to, or concerning this Agreement, the parties obligations thereunder, your employment with or your separation from employment with the Company, the parties will first submit the dispute to non-binding mediation. The Company will pay for the mediation and select the mediator. Should the dispute remain unresolved after one day of mediation, the Company and you agree that said dispute or controversy arising out of, in relation to, or in connection with this Agreement or your employment with the Company, or the making, interpretation, construction, performance or breach of this Agreement shall be finally settled by binding arbitration in Massachusetts under the then current expedited rules of the American Arbitration Association by one (1) arbitrator mutually selected by the parties or in the event the parties cannot mutually agree, then appointed in accordance with such rules. The arbitrator may grant injunctive or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court of competent jurisdiction. The parties agree that, any provision of applicable law notwithstanding, they will not request and the arbitrator shall have no authority to award, punitive or exemplary damages against any party. Notwithstanding anything in this Section 17 to the contrary, claims may be made in any Massachusetts court of competent jurisdiction by you or the Company for equitable relief to prevent a breach or threatened breach of any provision of this Agreement. Both you and the Company expressly waive any right that any party either has or may have to a jury trial of any dispute arising out of or in any way related to your employment with or termination from the Company.

18. **Applicable Law**. This Agreement will be governed by, and construed and enforced in accordance with, the laws of the Commonwealth of Massachusetts applicable to contracts made and to be performed therein, without giving effect to the principles thereof relating to the conflict of laws.

19. **Entire Agreement**. This Agreement contains and constitutes the entire understanding and agreement between the parties hereto with respect to your Severance Benefits and the settlement of claims against the Company and cancels all previous oral and written negotiations, agreements, and commitments in connection therewith. Nothing in this Section 19, however, shall modify, cancel or supersede your obligations set forth in Section 5 above.

[Signature page follows.]

If you have any questions about the matters covered in this Agreement, please call **[INSERT NAME AND TELEPHONE NUMBER]**.

Very truly yours,

Kala Pharmaceuticals, Inc.

By:
[INSERT NAME]

I hereby agree to the terms and conditions set forth above. I have been given at least twenty-one (21) days to consider this Agreement, and I have chosen to execute this on the date below. I intend that this Agreement will become a binding agreement between me and the Company if I do not revoke my acceptance in seven (7) days.

[INSERT EMPLOYEE NAME] Date

To be returned in a timely manner as set forth on the first page of this Agreement.