### 424B4 1 d516071d424b4.htm 424B4

**Table of Contents** 

Filed Pursuant to Rule 424(b)(4) Registration No. 333-227237

9,000,000 Shares



Common Stock

Kodiak Sciences Inc. is offering 9,000,000 shares of its common stock. This is our initial public offering and no public market currently exists for our common stock. The initial public offering price is \$10.00 per share. We have been approved to list our common stock on the Nasdaq Global Market under the symbol "KOD."

We are an "emerging growth company" as defined under the federal securities laws. Investing in our common stock involves risks. See the section of this prospectus titled "<u>Risk Factors</u>" beginning on page 14.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Initial public offering price Underwriting discounts and commissions<sup>(1)</sup> Proceeds to Kodiak Sciences Inc.

(1) See the section of this prospectus titled "Underwriting" for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase an additional 1,350,000 shares of our common stock to cover overallotments, if any.

Investment entities affiliated with certain of our principal stockholders and certain of our other existing securityholders have agreed to purchase an aggregate of 5,750,000 shares of our common stock in this offering. The underwriters will receive the same underwriting discounts and commissions on any shares purchased by these investment entities as they will on any other shares sold to the public in this offering.

Delivery of the shares of common stock is expected to be made on or about October 9, 2018.

### Morgan Stanley

### BofA Merrill Lynch

Per

Share

\$10.00

\$ 0.70

\$ 9.30

Total

\$90,000,000

\$ 6,300,000

\$83,700,000

### Barclays

### Chardan

The date of this prospectus is October 3, 2018

#### TABLE OF CONTENTS

	Page		Page
Prospectus Summary	1	Certain Relationships and Related Party Transactions	174
Risk Factors	14	Principal Stockholders	177
Special Note Regarding Forward-Looking Statements	61	Description of Capital Stock	180
Use of Proceeds	63	Shares Eligible for Future Sale	185
Dividend Policy	64	Material U.S. Federal Income and Estate Tax Consequences for	
Capitalization	65	Non-U.S. Holders of Common Stock	188
Dilution	67	Underwriting	192
Selected Consolidated Financial Data	69	Legal Matters	199
Management's Discussion and Analysis of Financial Condition		Experts	199
and Results of Operations	71	Where You Can Find Additional Information	199
Business	88	Index to Consolidated Financial Statements	F-1
Management	151		
Executive Compensation	159		

We have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we may have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters have not authorized any other person to provide you with different or additional information. Neither we nor the underwriters are making an offer to sell shares of our common stock in any jurisdiction where the offer or sale is not permitted. The information 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 our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

# Until and including October 28, 2018 (25 days after the date of this prospectus), all dealers that buy, sell or trade our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

For investors outside of the United States: neither we nor any of the underwriters have 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. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

i

#### 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. Before you decide to invest in our common stock, you should read the entire prospectus carefully, including the section titled "Risk Factors" and the consolidated financial statements and related notes included elsewhere in this prospectus. In this prospectus, unless otherwise stated or the context otherwise indicates, references to "Kodiak," "we," "us," "our" and similar references refer to Kodiak Sciences Inc. and its subsidiaries taken as a whole.

#### Overview

We are a clinical stage biopharmaceutical company specializing in novel therapeutics to treat chronic, high-prevalence retinal diseases. Our most advanced product candidate is KSI-301, a biologic therapy built with our antibody biopolymer conjugate, or ABC, platform, which is designed to maintain potent and effective drug levels in ocular tissues. We believe that KSI-301, if approved, has the potential to become an important anti-VEGF therapy in wet age-related macular degeneration, or wet AMD, and diabetic retinopathy, or DR. KSI-301 and our ABC Platform were developed at Kodiak, and we own worldwide rights to those assets, including composition of matter patent protection for KSI-301. We have applied our ABC Platform to develop additional product candidates beyond KSI-301, including KSI-501, our bispecific anti-IL-6/VEGF bioconjugate. We intend to progress these and other product candidates to address high-prevalence ophthalmic diseases.

We initiated our first-in-human, Phase 1 clinical study of KSI-301 in the United States in nine patients in July 2018. We have successfully dosed all patients at the pre-planned dose levels and reached the primary safety and tolerability endpoint of the study. To date, no patients in the Phase 1 study have experienced any serious adverse events. To date, there have been no drug-related adverse events, no dose limiting toxicities and, notably, no intraocular inflammation observed at any dose. The patients are continuing to be followed through a 12-week safety follow-up period. Improvements in best corrected visual acuity, or BCVA, and reductions in macular thickness on optical coherence tomography imaging, or OCT, have been observed at all dose levels. Over the four-week follow up period after the single dose, six of nine subjects had achieved a 10 or more letter improvement in BCVA from baseline (defined as average of screening and day one visits). In the high dose cohort of three patients (patients 7, 8, and 9) at the four-week visit, the BCVA improvements from baseline were 13, 10.5, and 29.5 letters, respectively, with associated improvements on macular thickness evidenced on OCT. This suggests that KSI-301, a large antibody biopolymer conjugate, is biologically active at all dose levels tested in patients based on pharmacodynamic measures (OCT imaging of retinal thickness) and efficacy measures (vision improvement). Having successfully met the primary endpoint of safety and tolerability in the Phase 1 study, with the additional observations around bioactivity, we plan to further evaluate the highest dose tested of KSI-301, 5 mg, in a series of global studies in wet AMD and DR, including diabetic macular edema, or DME.

We expect to be dosing patients in a global Phase 2 study of KSI-301 in the United States in early 2019, and clinical trial applications to ex-U.S. regulatory authorities for this study are in progress. This randomized, controlled study in approximately 400 treatment naïve wet AMD patients will evaluate the non-inferiority of intravitreal KSI-301 administered as infrequently as every 16 weeks versus EYLEA (aflibercept) administered on its every 8-week labeled regimen. FDA has indicated that this Phase 2 study, if successful, can be supportive of a marketing application for KSI-301 as one of two pivotal studies in wet AMD required for approval in the United States. We also plan to initiate a Phase 2 clinical trial of KSI-301 in the U.S. and EU in DR patients. We additionally plan to initiate two Phase 2 studies in China, one in wet AMD and one in DR, and we are planning for these studies to have the same clinical design frameworks as our U.S. and EU studies. In parallel to initiating our Phase 2 studies, we intend to expand the scope of our Phase 1 study into a Phase 1b open label study to evaluate the treatment effect and safety of sequential doses of KSI-301 with more intensive ophthalmic imaging and ocular pharmacokinetic assessments.

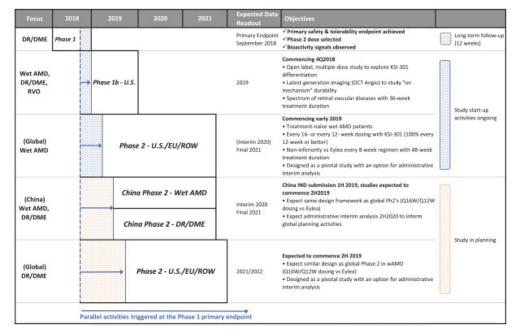
<sup>1</sup> 

### Target Indications

Our initial target indications for KSI-301 are wet AMD and DR. Wet AMD is a chronic and progressive disease of the central portion of the retina, known as the macula, which is responsible for sharp central vision and color perception. It is caused by abnormal blood vessels that grow underneath the retina and leak blood and fluid into the macula, causing visual distortion and acute vision loss, which can be permanent. Wet AMD is the leading cause of severe vision loss in adults over the age of 50 in the United States and the European Union, or EU. We estimate the combined prevalence of wet AMD in the United States and the EU to be approximately 2.9 million people. DR is a disease resulting from diabetes, in which chronically elevated blood sugar levels cause progressive damage to blood vessels in the retina. DR is the leading cause of blindness in working age adults in the United States and the EU. We estimate that the number of people in the United States and the EU with DR in 2015 was approximately 28.5 million.

### **Ongoing and Planned Clinical Development**

The following chart summarizes our clinical development plan for our lead product candidate, KSI-301:



For approval in the U.S. and the EU, we anticipate that one additional confirmatory study would be required for each of wet AMD and DR/DME and expect that the design framework for these studies would be similar to the planned Phase 2 studies.

Additional product candidates are in preclinical development. A final lead candidate has been selected for KSI-501, a bispecific antibody biopolymer conjugate being developed for DME and uveitis. KSI-201 (a bispecific antibody biopolymer conjugate) and KSI-401 (a mono-specific antibody biopolymer conjugate) are at the pre-IND stage being developed for treatment resistant wet AMD and dry AMD, respectively.

Program	Indication	Preclinical	Pre-IND	IND	Phase 1	Phase 2	Phase 3	Anticipated Milestone
KSI-301	wAMD/DME/DR					•		Initiate pivotal
								Phase 2 studies
KSI-501	DME/DR	$\rightarrow$						Submit IND
KSI-201	Resistant wAMD		<b>→</b>					Submit IND
KSI-401	Dry AMD							Submit IND

#### Current Standard of Care for Wet AMD and DR

Overexpression of vascular endothelial growth factor, or VEGF, in ocular tissues is central to the pathogenesis and clinical manifestations of wet AMD and DR. VEGF is a protein produced by cells that stimulates the formation of new blood vessels, a process called neovascularization, and induces vascular permeability. In wet AMD and DR, fluid that exits from blood vessels causes swelling, or edema, of the retina and loss of vision. This loss of vision can be reversed if treated early with an anti-VEGF agent to suppress VEGF signaling. Delayed treatment or undertreatment can result in permanent retinal damage and blindness. To reach effective ocular tissue concentrations, these agents must be injected into the vitreous humor, the jelly-like substance that fills the area between the lens and retina. These injections must occur at regular intervals in order to maintain anti-VEGF effects.

Lucentis (ranibizumab), marketed by Genentech, Inc., a subsidiary of the Roche Group, in the United States and by Novartis AG outside the United States, and EYLEA (aflibercept), marketed by Regeneron Pharmaceuticals, Inc. in the United States and by Bayer HealthCare LLC outside the United States, are anti-VEGF therapies that have become the standard of care for treating wet AMD and severe forms of DR based on pivotal clinical studies in which Lucentis was injected every four weeks and EYLEA was injected every eight weeks (after three initial monthly doses in the case of wet AMD and after five initial monthly doses in the case of DR with DME). Avastin (bevacizumab), marketed for non-ocular indications by Genentech in the United States and by Roche outside of the United States, is an anti-VEGF cancer therapy that shares structural characteristics with Lucentis and is commonly used off-label to treat wet AMD and DR through intravitreal injection dosed every four weeks.

Annual worldwide sales of Lucentis and EYLEA for all indications totaled approximately \$9.6 billion in 2017. We believe a substantial majority of these sales were in connection with the treatment of wet AMD and DR. Avastin, which is currently approved and marketed for the treatment of cancer, is also used off-label to treat wet AMD and DR. We estimate that off-label Avastin represents approximately 60% of the U.S. wet AMD market by volume. We believe that an improved anti-VEGF therapy could further increase both adoption of approved therapies and extend the duration patients remain on treatment, and thus, the total addressable market opportunity in wet AMD and DR could be substantial.

#### Limitations of Current Anti-VEGF Therapies

The limitations of current anti-VEGF therapies include:

• Existing anti-VEGF therapies block VEGF activity effectively but have limited durability. We believe current anti-VEGF therapies maintain potent and effective drug levels in ocular tissues for three to six weeks after injection on average. But typical treatment intervals in real-world clinical practice are longer. When a patient's dosing cycle is extended beyond the durability of the anti-VEGF agent, and the amount of drug remaining in the eye falls below therapeutic levels, the disease can progress and cause cumulative and permanent retinal damage. Most wet AMD and DR patients will require protracted anti-VEGF

therapy, possibly for life. Under these circumstances, strict adherence to the manufacturer's labeled treatment regimen of every four weeks for Lucentis and every eight weeks for EYLEA is challenging.

- Real-world utilization of current anti-VEGFs results in undertreatment, which diminishes effectiveness. A divergence between the efficacy
  of Lucentis and EYLEA in pivotal clinical trials and in the real world is evidenced in multiple studies and is increasingly recognized as an
  important unmet medical need. A 2017 report by the Angiogenesis Foundation suggested that the burden involved in monthly visits for
  evaluation and treatment causes patients and physicians to extend treatment intervals, which in turn results in undertreatment and visual
  outcomes that fall short of the results seen in clinical trials. For example, Lucentis was tested and failed to successfully extend the
  treatment interval to 12-week dosing, with patients going back to pre-treatment baseline or even losing vision at the end of the first year of
  treatment, on average. The Lucentis U.S. product labeling refers to this regimen as an option which is "not as effective" as monthly
  dosing. Recently, the FDA allowed an update to EYLEA's labeling to allow 12-week dosing, but only in the second year of treatment
  (after one full year of intensive treatment). The labeling refers to it as "not as effective as the recommended every 8-week dosing." Even a
  small deviation from per label dosing can be devastating for vision. Missing as few as one or two injections in a year from EYLEA's
  recommended dosing, results in almost one line of vision lost.
- Patients are not sustaining visual acuity gains over the long term. Following exit from tightly controlled clinical trials into the real-world environment, patients, on average, lose all the gains in visual acuity that had been previously achieved.
- Damage caused by these retinal diseases may be irreversible if anti-VEGF therapy is not initiated early in the disease progression. A study in patients with diabetic macular edema, or DME, a severe form of DR, found that undertreatment in the early course of patients' disease may reduce the patients' ability to respond to anti-VEGF therapies.

#### KSI-301: Our Lead Product Candidate

Our lead product candidate, KSI-301, is a novel, clinical stage anti-VEGF biological agent that combines inhibition of a known pathway with a potentially superior ocular durability profile compared to currently marketed drugs for wet AMD and DR.

KSI-301 is a bioconjugate comprised of two components. The first component is a humanized anti-VEGF monoclonal antibody which binds to human VEGF. The antibody component is designed to be pharmacologically similar to Lucentis. The second component of KSI-301 is an optically clear phosphorylcholine-based biopolymer which is stably attached to the antibody and which is intended to augment the stability and residence time of the bioconjugate in the eye without compromising its anti-VEGF activity.

We believe that KSI-301 can be a highly differentiated treatment with an improved durability profile compared to current anti-VEGF therapies because of its design features and the associated performance benefits we have observed with KSI-301 in pre-clinical studies. These design features include (1) an ultrahigh molecular weight of 950 kilodaltons, or kDa, versus 48 kDa (Lucentis) and 115 kDa (EYLEA) to increase intraocular durability, (2) a phosphorylcholine-based antibody biopolymer conjugate to increase ocular tissue bioavailability while preserving bioactivity, along with increased stability, and (3) an increased formulation strength to deliver higher molar doses of anti-VEGF (7x versus Lucentis and 3.5x versus EYLEA). We believe these qualities of KSI-301 have the potential to translate into clinically meaningful advantages over currently available therapies.

As a result, we believe that KSI-301 will (1) keep patients "on-mechanism" for longer than currently available anti-VEGF therapies, thereby preventing repeated undertreatment through overextension of treatment intervals, (2) match the required frequency of injections to keep the patient's disease quiescent with the

frequency of visits that patient and physician behavior suggest is achievable in clinical practice and (3) sustain the strong visual acuity gains of the early intensive treatment phase over the long term and outside of clinical trial contexts. By addressing the primary causes of undertreatment, KSI-301 has the potential to improve and sustain visual acuity outcomes in patients with neovascular conditions of the retina such as wet AMD and DR.

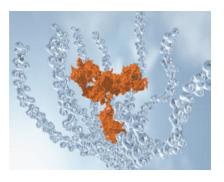


Figure: The structure of KSI-301. The branched phosphorylcholine-based biopolymer is optically clear. The bioactive antibody component is represented by the darker portion in the middle of the image. The two components are stably attached to each other, forming bioconjugate KSI-301.

### KSI-301 Phase 1 Clinical Study

We submitted our IND to the FDA in June 2018 for the use of KSI-301 in patients with retinal vascular diseases (including wet AMD and DR). We initiated our first-in-human, Phase 1, single ascending dose clinical study of KSI-301 in the United States in nine patients with centerinvolved diabetic macular edema in July 2018. Objectives of this study included assessment of ocular and systemic safety, tolerability, and establishment of a maximum tolerated dose. Three dose levels of KSI-301 were evaluated: 1.25 mg, 2.5 mg, and 5 mg, with 3 patients per cohort. We have successfully dosed all patients at the pre-planned dose levels and reached the primary safety and tolerability endpoint of the study, which occurred after each patient reached the 14-day follow up period following the single injection of KSI-301. The patients are continuing to be followed through a 12-week safety follow-up period. To date, no patients in the Phase 1 study have experienced any serious adverse events. To date, there have been no drug-related adverse events, no dose limiting toxicities and, notably, no intraocular inflammation observed at any dose. The Phase 1 trial in a heavily pre-treated patient population, with eight of nine DME patients having previously received anti-VEGF therapy, was designed to evaluate safety, yet biological activity of our antibody biopolymer conjugate was demonstrated across all dose cohorts. Improvements in BCVA and reductions in macular thickness on OCT have been observed at all dose levels. Over the four-week follow up period after the single dose, six of nine subjects had achieved a 10 or more letter improvement in BCVA from baseline (defined as average of screening and day one visits). In the high dose cohort of three patients (patients 7, 8, and 9) at the four-week visit, the BCVA improvements from baseline were 13, 10.5, and 29.5 letters, respectively, with associated improvements on macular thickness evidenced on OCT. This suggests that KSI-301, a large antibody biopolymer conjugate, is biologically active at all dose levels tested in patients based on pharmacodynamic measures (OCT imaging of retinal thickness) and efficacy measures (vision improvement). Having successfully met the primary endpoint of safety and tolerability in the Phase 1 study, with the additional observations around bioactivity, we plan to further evaluate the highest dose tested of KSI-301, 5 mg, in a series of global studies in wet AMD and DME/DR. Our IND for KSI-301 covers retinal vascular diseases and, in the future, we may also pursue other target indications for KSI-301, such as macular edema due to retinal vein occlusion, choroidal neovascularization due to pathologic myopia, or other diseases for which existing anti-VEGF therapies have been approved.

### Experienced Management Team

We are led by a team of experienced pharmaceutical industry executives and recognized experts in retinal disease. Our management team includes co-founder, Chairman and Chief Executive Officer, Victor Perlroth, M.D., Chief Financial Officer, John A. Borgeson, Chief Medical Officer and Chief Development Officer, Jason S. Ehrlich, M.D., Ph.D., and Senior Vice President – Discovery Medicine, Hong Liang, Ph.D. Dr. Perlroth was previously a venture partner and entrepreneur-in-residence at MPM Capital, a healthcare venture capital investment firm, and co-founded Avidia Inc., a biopharmaceuticals drug discovery and development company, where he served as general manager and vice president of corporate development. Mr. Borgeson has over 25 years of pharmaceutical experience in finance, strategy and operations at Pfizer Inc. and privately-held biotechnology companies. Dr. Ehrlich is an ophthalmologist and spent 10 years in positions of increasing responsibility at Roche/Genentech, serving most recently in an executive capacity as global head of clinical ophthalmology, where he had oversight and responsibility for numerous clinical development programs and regulatory filings. Dr. Liang has 20 years of experience in research and development in protein therapeutics. She was Senior Director at the Rinat Laboratory of Pfizer where she worked for over 12 years focusing on antibody biologics from the design and discovery stage through Phase 3 clinical development as well as the application of translational biomarkers to drug development.

### Our Strategy

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing therapeutics for the treatment of ophthalmic diseases. The key elements of our strategy are:

- Complete clinical development of KSI-301 for wet AMD and DR. We are devoting a significant portion of our resources and business efforts to the clinical development of KSI-301 for wet AMD and DR. We anticipate initiating a Phase 2 wet AMD study of KSI-301 in the U.S. and EU in early 2019 to evaluate the non-inferiority of intravitreal KSI-301 administered as infrequently as every 16-weeks versus EYLEA. The FDA has indicated that this study, KSI-CL-102, if successful, can be supportive of a marketing application for KSI-301. We are thus designing and intend to execute this Phase 2 study as a pivotal study. We also plan to initiate a Phase 2 clinical trial of KSI-301 in the U.S. and EU in DR patients. We also plan to initiate two Phase 2 studies in China, one in wet AMD and one in DR, and we are planning for these studies to have the same clinical design frameworks as our U.S. and EU studies. We plan to perform an administrative interim analysis of our Phase 2 data after approximately 200 patients (100 on KSI-301 and 100 on EYLEA) have been treated for approximately 6 months, to evaluate both the comparative vision outcomes at that point for KSI-301 and EYLEA as well as the KSI-301 Q16W (once every 12 weeks) durability proportion. We expect to undertake this administrative interim analysis in our China Phase 2 studies but plan to include the potential for this interim analysis in our global Phase 2 programs, we are expanding the scope of our Phase 1 study into a Phase 1b open label design to evaluate the safety and treatment effect of sequential doses of KSI-301 in patients with wet AMD and DR.
- *Establish market acceptance of KSI-301 in wet AMD and DR.* We believe that if KSI-301 is approved and is shown to have comparable efficacy and improved durability to other anti-VEGF therapies, it will compete favorably with other marketed products for wet AMD and DR. In addition, we believe KSI-301 may potentially expand the market reach to patients not currently on approved standard of care therapies or not currently on therapy at all.
- Seek to expand the use of KSI-301 in DR beyond DME. We intend to explore the use of KSI-301 in the treatment of all subtypes of DR patients. Currently marketed anti-VEGFs are used primarily to treat late and advanced manifestations of DR, particularly DME. We believe that the improved durability of KSI-301 has the potential to not only improve the standard of care but also expand the patient population

that receives anti-VEGF therapy to include patients with less severe forms of DR for whom frequent injections may be a barrier to adoption.

- Commercialize KSI-301 with our own specialty sales force. KSI-301 is wholly-owned by us. If KSI-301 receives marketing approval, we plan to commercialize it in the United States with our own focused, specialty sales force. We believe that retinal specialists in the United States, who perform most of the medical procedures involving retinal diseases, are sufficiently concentrated that we will be able to effectively promote KSI-301 with a sales and marketing group of fewer than 200 people. We expect to explore collaboration, distribution or other marketing arrangements with one or more third parties to commercialize KSI-301 in markets outside the United States.
- Advance the development of our other ABC product candidates. We intend to continue deploying capital to selectively develop our own
  portfolio of product candidates based on our ABC Platform (including bispecific inhibitors such as KSI-501). We may partner with
  biotechnology and pharmaceutical companies to further develop our ABC Platform and product candidates.
- Discover and develop future product candidates for areas of unmet need. We intend to continue our discovery efforts and deepen our
  pipeline of medicines for high prevalence ophthalmic diseases. We may opportunistically in-license or acquire the rights to
  complementary products, other product candidates and technologies to aid in the treatment of a range of ophthalmic diseases, principally
  diseases of the retina.

#### **Risks Associated with Our Business**

Our business is subject to numerous risks, including those described in the section titled "Risk Factors" immediately following this prospectus summary. These risks include, among others:

- We are in the early clinical stage of drug development and have a very limited operating history and no products approved for commercial sale.
- We have incurred significant net losses in each period since our inception and anticipate that we will continue to incur net losses for the foreseeable future.
- We may encounter substantial delays in our clinical trials or may not be able to conduct or complete our clinical trials on the timelines we expect, if at all.
- If we fail to obtain additional financing, we may be unable to complete the development and, if approved, commercialization of our product candidates.
- We are heavily dependent on the successful development of our ABC Platform and our primary product candidate, KSI-301, which is in the early stages of clinical development.
- We may not be successful in our efforts to continue to create a pipeline of product candidates or to develop commercially successful products.
- We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our
  competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours.
- If we are unable to obtain and maintain patent protection for any product candidates we develop or for our ABC Platform, our competitors could develop and commercialize products or technology similar or identical to ours.

#### **Corporate Information**

We were organized in Delaware as a limited liability company in June 2009 under the name Oligasis, LLC. In September 2015, we converted to a Delaware corporation and changed our name to "Kodiak Sciences Inc." Our principal executive office is located at 2631 Hanover Street, Palo Alto, California 94304. Our telephone

number is (650) 281-0850. Our website is www.kodiak.com. Information contained in, or that can be accessed through, our website is not a part of, and is not incorporated into, this prospectus.

We use Kodiak, Kodiak Sciences, the Kodiak logo, and other marks as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the <sup>®</sup> or <sup>TM</sup> symbols, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

#### Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or JOBS Act. We will remain an emerging growth company until the earliest to occur of: the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; the date we qualify as a "large accelerated filer," with at least \$700 million of equity securities held by non-affiliates; the issuance, in any three-year period, by us of more than \$1.0 billion in non-convertible debt securities; and the last day of the fiscal year ending after the fifth anniversary of our initial public offering. As a result of this status, we have taken advantage of reduced reporting requirements in this prospectus and may elect to take advantage of other reduced reporting requirements in our future filings with the SEC. 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. In addition, the JOBS Act provides that an emerging growth company may take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies unless we otherwise irrevocably elect not to avail itself of this exemption. However, we have chosen to irrevocably "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to not take advantage of the extended transition period for complying with new or revised accounting standards is irrevocable.

The Offering				
Common stock offered by us	9,000,000 shares			
Common stock to be outstanding immediately after this offering	36,573,353 shares (or 37,923,353 shares if the underwriters exercise their option to purchase additional shares in full)			
Underwriters' option to purchase additional shares of common stock from us	1,350,000 shares			
Use of proceeds	We estimate that the net proceeds from this offering will be approximately \$80.1 million, or approximately \$92.7 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 currently expect to use the net proceeds from this offering together with our existing cash and cash equivalents as follows: (1) approximately \$40 million to advance KSI-301 through completion of enrollment of the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with wet AMD as well as through completion of a Phase 1b clinical trial; (2) approximately \$25 million to advance KSI-301 into Phase 2 clinical trials in China for wet AMD and DME/DR and through an administrative interim analysis in each of the studies (anticipated to occur when approximately 200 patients have completed approximately six months of treatment duration, per study); (3) approximately \$15 million to advance KSI-301 into the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with DME/DR; and (4) the remainder for research and development of our pipeline including KSI-501, to initiate additional clinical studies in ophthalmology and for working capital and other general corporate purposes. We may also use a portion of the net proceeds to acquire, license, and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. See the section of this prospectus titled "Use of Proceeds."			
Purchases by existing securityholders or their affiliates	Investment entities affiliated with certain of our principal stockholders and certain of our other existing securityholders have agreed to purchase an aggregate of 5,750,000 shares of our common stock in this offering. The underwriters will receive the same underwriting discounts and commissions on any shares purchased by these investment entities as they will on any other shares sold to the public in this offering.			
Directed share program	At our request, the underwriters have reserved 5% of the shares of common stock to be offered by this prospectus for sale, at the initial public offering price, to directors, officers, employees, business associates and other persons related to us. If purchased by these persons, these shares will not be subject to a lock-up			

	restriction, except in the case of shares purchased by any director, executive officer or employee. The number of shares of common stock available for sale to the general public will be reduced to the extent these individuals purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered by this prospectus.
Nasdaq trading symbol	"KOD"
Risk factors	See the section of this prospectus titled "Risk Factors" beginning on page 14 and other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.
The number of shares of our common stoc outstanding as of June 30, 2018, and excludes:	k outstanding immediately after this offering is based on 7,964,234 shares of common stock
• 3,383,478 shares of common stock issu price of \$3.82 per share;	able upon the exercise of outstanding options as of June 30, 2018 with a weighted-average exercise
<ul> <li>shares issuable upon conversion of accursince June 30, 2018;</li> </ul>	rued interest on our outstanding 2017 convertible notes and our outstanding 2018 convertible notes
• 398,693 shares of common stock reserv	red for future issuance under our 2015 Share Incentive Plan as of June 30, 2018;
	erved for future issuance under our 2018 Equity Incentive Plan (including 1,278,954 shares subject prospectus, and 60,000 shares subject to restricted stock units which will become effective upon 'orm S-8); and
• 460,000 shares of common stock reserv	red for future issuance under our 2018 Employee Stock Purchase Plan.
Except as otherwise indicated, all informa	tion in this prospectus assumes:
• the automatic conversion of all of our of common stock immediately prior to	butstanding shares of redeemable convertible preferred stock into an aggregate of 12,385,154 shares the closing of this offering;
	convertible notes into an aggregate of 2,497,722 shares of common stock immediately prior to the ersion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion
	convertible notes into an aggregate of 4,226,243 shares of our common stock immediately prior to onversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a
• the issuance of 500,000 shares of commoutstanding as of June 30, 2018 at an example.	non stock immediately following the closing of this offering issuable upon the exercise of warrants xercise price of \$0.01 per share;
	nding as of the date of this prospectus, 525,000 of which were granted subsequent to June 30, 2018, to options granted as of the date of this prospectus under our 2018 Equity Incentive Plan;

- the filing of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering; and
- no exercise of the underwriters' option to purchase additional shares.

#### SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth a summary of our consolidated financial data. The consolidated statement of operations data for the years ended December 31, 2016 and 2017 are derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The consolidated statement of operations data for the six months ended June 30, 2017 and 2018 and the consolidated balance sheet data as of June 30, 2018 are derived from our unaudited consolidated financial statements and related notes included elsewhere in this prospectus. In the opinion of management, the unaudited data reflects all adjustments, consisting solely of normal recurring adjustments, necessary for the fair presentation of the financial information in those statements. You should read this data together with our consolidated financial statements and related notes included of Financial Condition and Results of Operations." Our historical results are not necessarily indicative of our future results, and the results of operations for the years ended December 31, 2016 and 2017 and any interim period are not necessarily indicative of the results to be expected for any other period. The summary consolidated financial data in this section are not intended to replace the consolidated financial statements and related notes included elsewhere in this prospectus.

	Year Ended December 31,		Six Months Ended June 30,		
	2016	2017 (in thousands, exc	2017	2018	
		share	data)		
Consolidated Statement of Operations Data:					
Operating expenses:					
Research and development	\$ 14,053	\$ 22,022	\$ 10,098	\$ 7,233	
General and administrative	3,098	3,499	1,687	3,404	
Total operating expenses	17,151	25,521	11,785	10,637	
Loss from operations	(17,151)	(25,521)	(11,785)	(10,637)	
Interest expense	(6)	(1,185)	(12)	(3,347)	
Other income (expense), net	25	(1,230)	14	(2,345)	
Net loss and comprehensive loss	\$ (17,132)	\$ (27,936)	\$ (11,783)	\$ (16,329)	
Net loss per share attributable to common stockholders, basic and diluted	\$ (2.38)	\$ (3.72)	\$ (1.58)	\$ (2.11)	
Weighted-average shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted	7,211,360	7,515,336	7,444,612	7,720,967	
Pro forma net loss per share attributable to common stockholders, basic and diluted <sup>(1)</sup>		<u>\$ (1.21)</u>		\$ 0.40	
Weighted-average shares outstanding used in computing pro forma net loss per share, basic and diluted <sup>(1)</sup>		21,074,940		26,556,248	

		As of June 30, 2018			
	Actual	Pro Forma <sup>(2)</sup> (in thousands)	Pro Forma As Adjusted <sup>(3)</sup>		
Consolidated Balance Sheet Data:		· · · ·			
Cash and cash equivalents	\$ 17,641	\$ 17,641	\$ 98,600		
Working capital <sup>(4)</sup>	13,617	13,617	95,871		
Total assets	21,703	21,703	100,508		
Convertible notes	39,495	_	_		
Redeemable convertible preferred stock warrant liability	4,005	_	_		
Derivative instrument	7,367	_	_		
Total liabilities	55,913	5,046	3,751		
Redeemable convertible preferred stock	50,017	_	_		
Accumulated deficit	(85,652)	(92,750)	(92,750)		
Total stockholders' (deficit) equity	(84,227)	16,657	96,757		

(1) For the calculation of our pro forma net loss per share and pro forma weighted-average shares outstanding, see Note 14 to our consolidated financial statements included elsewhere in this prospectus.

(2) Reflects, on a pro forma basis, (1) the automatic conversion of the redeemable convertible preferred stock into 12,385,154 shares of common stock as of June 30, 2018, (2) the assumed conversion of the outstanding 2017 convertible notes into an aggregate of 2,497,722 shares of our common stock immediately prior to the closing of this offering (assuming conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share), (3) the automatic conversion of the outstanding 2018 convertible notes into an aggregate of 4,226,243 shares of our common stock immediately prior to the closing of this offering (assuming conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$8.00 per share), (4) the resulting settlement of the derivative instrument upon the conversion of the 2018 convertible notes and the \$7.1 million impact to accumulated deficit as a result of the fair value adjustment to the derivative and loss on extinguishment of the 2018 convertible notes, (5) the automatic conversion of warrants to purchase 500,000 shares of our Series B redeemable convertible preferred stock as of June 30, 2018 into warrants to purchase an equivalent number of shares of our common stock and assuming the exercise of the common stock warrants immediately following the closing of this offering, and (6) the filing of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering.

(3) Reflects, on a pro forma as adjusted basis, the pro forma conversion adjustments described in footnote (2) above, as well as the sale and issuance by us of 9,000,000 shares of common stock in this offering at the initial public offering price of \$10.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

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

#### **RISK FACTORS**

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

#### Risks Related to Our Business, Financial Condition and Capital Requirements

# We are in the early clinical stage of drug development and have a very limited operating history and no products approved for commercial sale, which may make it difficult to evaluate our current business and predict our future success and viability.

We are a clinical stage biopharmaceutical company specializing in novel therapeutics to treat chronic, high-prevalence retinal diseases. We commenced operations in June 2009, have no products approved for commercial sale and have not generated any revenue. Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We met the primary endpoint for our ongoing Phase 1 clinical trial for our most advanced product candidate, KSI-301, in September 2018, but have not initiated clinical trials for any of our other product candidates. To date, we have not completed a clinical trial (including a pivotal clinical trial), obtained marketing approval for any product candidates, manufactured a commercial scale product or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Our limited operating history as a company and early stage of drug development make any assessment of our future success and viability subject to significant uncertainty. We will encounter risks and difficulties frequently experienced by early-stage biopharmaceutical companies in rapidly evolving fields, and we have not yet demonstrated an ability to successfully overcome such risks and difficulties. If we do not address these risks and difficulties successfully, our business will suffer.

# We have incurred significant net losses in each period since our inception and anticipate that we will continue to incur significant and increasing net losses for the foreseeable future.

We have incurred net losses in each reporting period since our inception, including net losses of \$11.8 million and \$16.3 million for the six months ended June 30, 2017 and 2018, respectively. As of June 30, 2018, we had an accumulated deficit of \$85.7 million.

We have invested significant financial resources in research and development activities, including for our product candidates and our ABC Platform. We do not expect to generate revenue from product sales for several years, if at all. The amount of our future net losses will depend, in part, on the level of our future expenditures and our ability to generate revenue. Moreover, our net losses may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance.

We expect to continue to incur significant and increasingly higher expenses and operating losses for the foreseeable future. We anticipate that our expenses will increase substantially if and as we:

- · progress our current and any future product candidates through preclinical and clinical development;
- work with our contract manufacturers to scale up the manufacturing processes for our product candidates or, in the future, establish and operate
  a manufacturing facility;
- · continue our research and discovery activities;
- continue the development of our ABC Platform;
- · initiate and conduct additional preclinical, clinical or other studies for our product candidates;

- · change or add additional contract manufacturers or suppliers;
- seek regulatory approvals and marketing authorizations for our product candidates;
- establish sales, marketing and distribution infrastructure to commercialize any products for which we obtain approval;
- · acquire or in-license product candidates, intellectual property and technologies;
- · make milestone, royalty or other payments due under any current or future collaboration or license agreements;
- · obtain, maintain, expand, protect and enforce our intellectual property portfolio;
- attract, hire and retain qualified personnel;
- · experience any delays or encounter other issues related to our operations;
- · meet the requirements and demands of being a public company; and
- · defend against any product liability claims or other lawsuits related to our products.

Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' deficit and working capital. In any particular quarter or quarters, our operating results could be below the expectations of securities analysts or investors, which could cause our stock price to decline.

As of June 30, 2018, we had cash and cash equivalents of \$17.6 million. Without giving effect to the anticipated net proceeds from this offering, we do not believe that those cash and cash equivalents will be sufficient to enable us to fund our current operations for at least one year from the original issuance date of our consolidated financial statements for the period ended June 30, 2018. We believe that this raises substantial doubt about our ability to continue as a going concern. See Note 1 to our consolidated financial statements included elsewhere in this prospectus for additional information on our assessment. Similarly, the report of our independent registered public accounting firm on our consolidated financial statements as of and for the year ended December 31, 2017 includes an explanatory paragraph indicating that there is substantial doubt about our ability to continue as a going concern.

# Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have never generated any revenue from product sales, and we may never generate revenue or be profitable.

We have no products approved for commercial sale and have not generated any revenue from product sales. We do not anticipate generating any revenue from product sales until after we have successfully completed clinical development and received regulatory approval for the commercial sale of a product candidate, if ever.

Our ability to generate revenue and achieve profitability depends significantly on many factors, including:

- successfully completing research and preclinical and clinical development of our product candidates;
- obtaining regulatory approvals and marketing authorizations for product candidates for which we successfully complete clinical development and clinical trials;
- developing a sustainable and scalable manufacturing process for our product candidates, as well as establishing and maintaining commercially viable supply relationships with third parties that can provide adequate products and services to support clinical activities and any commercial demand for our product candidates;
- · identifying, assessing, acquiring and/or developing new product candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- launching and successfully commercializing product candidates for which we obtain regulatory and marketing approval, either by collaborating
  with a partner or, if launched independently, by establishing a sales, marketing and distribution infrastructure;

- obtaining and maintaining an adequate price for our product candidates, both in the United States and in foreign countries where our products are commercialized;
- · obtaining adequate reimbursement for our product candidates from payors;
- · obtaining market acceptance of our product candidates as viable treatment options;
- · addressing any competing technological and market developments;
- maintaining, protecting, expanding and enforcing our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Because of the numerous risks and uncertainties associated with drug development, we are unable to predict the timing or amount of our expenses, or when we will be able to generate any meaningful revenue or achieve or maintain profitability, if ever. In addition, our expenses could increase beyond our current expectations if we are required by the U.S. Food and Drug Administration, or FDA, or foreign regulatory agencies, to perform studies in addition to those that we currently anticipate, or if there are any delays in any of our or our future collaborators' clinical trials or the development of any of our product candidates. Even if one or more of our product candidates is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate and ongoing compliance efforts.

Even if we are able to generate revenue from the sale of any approved products, we may not become profitable, and we will need to obtain additional funding through one or more debt or equity financings in order to continue operations. Revenue from the sale of any product candidate for which regulatory approval is obtained will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to get reimbursement at any price and whether we own the commercial rights for that territory. If the number of addressable patients is not as significant as we anticipate, the indication approved by regulatory authorities is narrower than we expect, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. 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 could 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 pipeline of product candidates or continue our operations and cause a decline in the value of our common stock, all or any of which may adversely affect our viability.

# If we fail to obtain additional financing, we may be unable to complete the development and, if approved, commercialization of our product candidates.

Our operations have required substantial amounts of cash since inception. To date, we have financed our operations primarily through the sale of equity securities and convertible notes. Developing our product candidates is expensive, and we expect to substantially increase our spending as we advance KSI-301 into Phase 2 clinical trials. Even if we are successful in developing our product candidates, obtaining regulatory approvals and launching and commercializing any product candidate will require substantial additional funding beyond the net proceeds from this offering.

As of June 30, 2018, we had \$17.6 million in cash and cash equivalents. We estimate that our net proceeds from this offering will be approximately \$80.1 million after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Although we believe that our existing cash and cash equivalents along with the anticipated net proceeds from this offering will be sufficient to fund our projected operations through at least the next 12 months, our estimate as to how long we expect our existing cash and cash equivalents to be available to fund our operations is based on assumptions that may prove inaccurate, and we could use our available capital

resources sooner than we currently expect. In addition, changing circumstances may cause us to increase our spending significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may need to raise additional funds sooner than we anticipate if we choose to expand more rapidly than we presently anticipate.

We will require additional capital for the further development and, if approved, commercialization of our product candidates. Additional capital may not be available when we need it, on terms acceptable to us or at all. We have no committed source of additional capital. If adequate capital is not available to us on a timely basis, we may be required to significantly delay, scale back or discontinue our research and development programs or the commercialization of any product candidates, if approved, or be unable to continue or expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition and results of operations and cause the price of our common stock to decline.

# Due to the significant resources required for the development of our product candidates, and depending on our ability to access capital, we must prioritize development of certain product candidates. Moreover, we may expend our limited resources on product candidates that do not yield a successful product and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Due to the significant resources required for the development of our product candidates, we must decide which product candidates and indications to pursue and advance and the amount of resources to allocate to each. Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular product candidates or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities. Similarly, our potential decisions to delay, terminate or collaborate with third parties in respect of certain product candidates may subsequently also prove to be suboptimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the viability or market potential of any of our product candidates or misread trends in the biopharmaceutical industry, in particular for retinal disease, our business, financial condition and results of operations could be materially adversely affected. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other product candidates or other diseases pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such product candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to invest additional resources to retain sole development and commercialization rights.

#### Risks Related to the Discovery, Development and Commercialization of Our Product Candidates

# Our prospects are heavily dependent on KSI-301, which is in the early stages of clinical development and is the only product candidate that we expect to be in clinical development in the near term.

KSI-301 is our only product candidate that we expect to be in clinical studies in the near term. We initiated an ongoing Phase 1 clinical trial of KSI-301 in July 2018 and reached the primary endpoint in September 2018. Neither KSI-301 nor any of our other product candidates has been dosed in a pivotal clinical trial, and it may be years before any such trial is completed, if at all. Further, we cannot be certain that either KSI-301 or any of our product candidates will be successful in clinical trials.

Our early encouraging preclinical and Phase 1 clinical trial results for KSI-301 are not necessarily predictive of the results of our ongoing or future discovery programs or clinical studies. Our Phase 1 clinical trial was designed to evaluate safety and tolerability of KSI-301. Although it has yielded early evidence of bioactivity, it consisted of only nine subjects, and we expect that our Phase 2 trials will have materially different design parameters. For example, our Phase 1 trial did not evaluate durability of KSI-301 across the planned 12 or 16 week dosing intervals that we intend to evaluate in our Phase 2 trials. Promising results in preclinical studies and Phase 1 clinical trials of a drug candidate may not be predictive of similar results in later-stage preclinical studies or in humans during clinical studies. Many companies in the pharmaceutical and biotechnology industries have

suffered significant setbacks in late-stage clinical studies after achieving positive results in early-stage development, including early-stage clinical studies, and we cannot be certain that we will not face similar setbacks. These setbacks have been caused by, among other things, preclinical findings made while clinical studies were underway or safety or efficacy observations made in preclinical studies and clinical studies, including previously unreported adverse events.

There can be significant variability in safety or efficacy results between different clinical studies of the same product candidate due to numerous factors, including changes in study procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the clinical study protocols and the rate of dropout among clinical study participants. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical studies nonetheless failed to obtain FDA approval.

We may in the future advance product candidates into clinical trials and terminate such trials prior to their completion. While we have certain preclinical programs in development and intend to develop other product candidates, it will take additional investment and time for such programs to reach the same stage of development as KSI-301.

#### A failure of KSI-301 in clinical development may require us to discontinue development of other product candidates based on our ABC Platform.

If KSI-301 fails in development as a result of any underlying problem with our platform, then we may discontinue development of some or all of our product candidates that are based our ABC Platform. If we discontinue development of KSI-301, or if KSI-301 were to fail to receive regulatory approval or were to fail to achieve sufficient market acceptance, we could be prevented from or significantly delayed in achieving profitability.

# Research and development of biopharmaceutical products is inherently risky. We cannot give any assurance that any of our product candidates will receive regulatory, including marketing, approval, which is necessary before they can be commercialized.

We are at an early stage of development of our product candidates. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize our product candidates, and we may fail to do so for many reasons, including the following:

- · our product candidates may not successfully complete preclinical studies or clinical trials;
- a product candidate may on further study be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- our competitors may develop therapeutics that render our product candidates obsolete or less attractive;
- our competitors may develop platform technologies that render our ABC Platform obsolete or less attractive;
- the product candidates and ABC Platform that we develop may not be sufficiently covered by intellectual property for which we hold exclusive
  rights or may be covered by third party patents or other intellectual property or exclusive rights;
- the market for a product candidate may change so that the continued development of that product candidate is no longer reasonable or commercially attractive;
- · a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all;

- if a product candidate obtains regulatory approval, we may be unable to establish sales and marketing capabilities, or successfully market such approved product candidate, to gain market acceptance; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors, if applicable.

If any of these events occur, we may be forced to abandon our development efforts for a product candidate or candidates, which would have a material adverse effect on our business and could potentially cause us to cease operations. Failure of a product candidate may occur at any stage of preclinical or clinical development, and, because our product candidates and our ABC Platform are in an early stage of development, there is a relatively higher risk of failure and we may never succeed in developing marketable products or generating product revenue.

We may not be successful in our efforts to further develop our ABC Platform and current product candidates. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates. Each of our product candidates is in the early stages of development and will require significant additional clinical development, management of preclinical, clinical, and manufacturing activities, regulatory approval, adequate manufacturing supply, a commercial organization, and significant marketing efforts before we generate any revenue from product sales, if at all. Any clinical studies that we may conduct may not demonstrate the efficacy and safety necessary to obtain regulatory approval to market our product candidates. If the results of our ongoing or future clinical studies are inconclusive with respect to the efficacy of our product candidates or if we do not meet the clinical endpoints with statistical significance or if there are safety concerns or adverse events associated with our product candidates, we may be prevented or delayed in obtaining marketing approval for our product candidates.

If any of our product candidates successfully completes clinical trials, we generally plan to seek regulatory approval to market our product candidates in the United States, the European Union, or EU, and in additional foreign countries where we believe there is a viable commercial opportunity. We have never commenced, compiled or submitted an application seeking regulatory approval to market any product candidate. We may never receive regulatory approval to market any product candidates even if such product candidates successfully complete clinical trials, which would adversely affect our viability. To obtain regulatory approval in countries outside the United States, we must comply with numerous and varying regulatory requirements of such other countries regarding safety, efficacy, chemistry, manufacturing and controls, clinical trials, commercial sales, pricing, and distribution of our product candidates. We may also rely on our collaborators or partners to conduct the required activities to support an application for regulatory approval, and to seek approval, for one or more of our product candidates. We cannot be sure that our collaborators or partners will conduct these activities successfully or do so within the timeframe we desire. Even if we (or our collaborators or partners) are successful in obtain approval in one jurisdiction, we cannot ensure that we will obtain approval in any other jurisdictions. If we are unable to obtain approval for our product candidates in multiple jurisdictions, our revenue and results of operations could be negatively affected.

Even if we receive regulatory approval to market any of our product candidates, we cannot assure you that any such product candidate will be successfully commercialized, widely accepted in the marketplace or more effective than other commercially available alternatives. That approval may be for indications or patient populations that are not as broad as intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We may also be required to perform additional or unanticipated clinical studies to obtain approval or be subject to additional post-marketing testing requirements to maintain regulatory approval. In addition, 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. The failure to obtain timely regulatory approval of product candidates, any product marketing limitations or a product withdrawal would negatively impact our business, results of operations and financial condition.

Investment in biopharmaceutical product development involves significant risk that any product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval, and become commercially viable. We cannot provide any assurance that we will be able to successfully advance any of our

product candidates through the development process or, if approved, successfully commercialize any of our product candidates.

# We may encounter substantial delays in our clinical trials, or may not be able to conduct or complete our clinical trials on the timelines we expect, if at all.

Clinical testing is expensive, time consuming, and subject to uncertainty. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. We cannot be sure that submission of an investigational new drug application, or IND, or a clinical trial application, or CTA, will result in the FDA, European Medicines Agency, or EMA, the China Drug Authority, or CDA, or any other regulatory authority as applicable, allowing clinical trials to begin in a timely manner, if at all. Moreover, even if these trials begin, issues may arise that could suspend or terminate such clinical trials. A failure of one or more clinical trials can occur at any stage of testing, and our future clinical trials may not be successful. Events that may prevent successful or timely initiation or completion of clinical trials include:

- inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation or continuation of clinical trials;
- delays in reaching a consensus with regulatory agencies on study design or, in the case of in China, the registration category for the drug
  candidate to be studied in the clinical trial;
- the determination by the reviewing regulatory authority to require more costly or lengthy clinical trials than we currently anticipate;
- delays in reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- · delays in identifying, recruiting and training suitable clinical investigators;
- · delays in obtaining required Institutional Review Board, or IRB, approval at each clinical trial site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND or amendment, CTA or amendment, or equivalent application or amendment; as a result of a new safety finding that presents unreasonable risk to clinical trial participants; a negative finding from an inspection of our clinical trial operations or study sites; developments on trials conducted by competitors for related technology that raises FDA, EMA, CDA or any other regulatory authority concerns about risk to patients of the technology broadly; or if the FDA, EMA, CDA or any other regulatory authority finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in identifying, recruiting and enrolling suitable patients to participate in our clinical trials, and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- · difficulty collaborating with patient groups and investigators;
- · failure by our CROs, other third parties, or us to adhere to clinical trial requirements;
- failure to perform in accordance with the FDA's or any other regulatory authority's current good clinical practices, or cGCPs, requirements, or applicable EMA, CDA or other regulatory guidelines in other countries;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;

- · changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of such product candidates;
- transfer of manufacturing processes to larger-scale facilities operated by a contract manufacturing organization, or CMO, or by us, and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing.

Any inability to successfully initiate or complete clinical trials could result in additional costs to us or impair our ability to generate revenue. In addition, if we make manufacturing or formulation changes to our product candidates, we may be required to or we may elect to conduct additional studies to bridge our modified product candidates to earlier versions. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the data safety monitoring board for such trial or by the FDA, EMA, CDA or any other regulatory authority, or if the IRBs of the institutions in which such trials are being conducted suspend or terminate the participation of their clinical investigators and sites subject to their review. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA, EMA, CDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Delays in the commencement or completion of any clinical trial of our product candidates will increase our costs, slow down our product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

# Our product candidates may cause undesirable side effects or have other properties that could halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.

Adverse events or other undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA, CDA or other comparable foreign regulatory authorities.

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries, and discomforts, to their study doctor. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. It is possible that as we test our product candidates in larger, longer and more extensive clinical trials, or as use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were not observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by patients. Many times, side effects are only detectable after investigational products are tested in large-scale, Phase 3

clinical trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that any of our product candidates has side effects or causes serious or life-threatening side effects, the development of the product candidate may fail or be delayed, or, if the product candidate has received regulatory approval, such approval may be revoked, which would severely harm our business, prospects, operating results and financial condition.

Our most advanced product candidate, KSI-301, is an anti-VEGF biologic that we intend to study in wet AMD and diabetic retinopathy, or DR. There are some potential side effects associated with intravitreal anti-VEGF therapies such as intraocular hemorrhage, intraocular pressure elevation, retinal detachment, inflammation or infection inside the eye and over-inhibition of VEGF, as well as the potential for potential systemic side effects such as heart attack, stroke, wound healing, and high blood pressure. Recent trends in the development of anti-VEGF therapies have favored increased molar dosages, as compared to currently marketed treatments. To date these heightened dosages have not exhibited a safety profile significantly worse than that of current treatments. However, anti-VEGF product candidates featuring higher molar dosages, including KSI-301, may heighten the risk of adverse effects associated with anti-VEGF treatments generally, both in the eye and other complications including conjunctival hemorrhage, punctate keratitis, eye pain, conjunctival hyperemia, intra-ocular inflammation, and endophthalmitis.

Drug-related side effects could affect patient recruitment, the ability of enrolled patients to complete the study and/or result in potential product liability claims. We may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business. In addition, regardless of merit or eventual outcome, product liability claims may result in impairment of our business reputation, withdrawal of clinical trial participants, costs due to related litigation, distraction of management's attention from our primary business, initiation of investigations by regulators, substantial monetary awards to patients or other claimants, the inability to commercialize our product candidates and decreased demand for our product candidates, if approved for commercial sale.

Additionally, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects or adverse events caused by such products, a number of potentially significant negative consequences could result, including but not limited to:

- · regulatory authorities may withdraw approvals of such product;
- · regulatory authorities may require additional warnings on the label;
- · we may be required to change the way the product is administered or conduct additional clinical trials or post-approval studies;
- we may be required to create a Risk Evaluation and Mitigation Strategy plan, which could include a medication guide outlining the risks of such side effects for distribution to patients, a communication plan for healthcare providers and/or other elements to assure safe use;
- we could be sued and held liable for harm caused to patients; and
- · our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations, and prospects.

We may encounter difficulties enrolling patients in our clinical trials, and our clinical development activities could thereby be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including:

- the size and nature of the patient population;
- the patient eligibility criteria defined in the protocol, including certain highly-specific criteria related to stage of disease progression, which may limit the patient populations eligible for our clinical trials to a greater extent than competing clinical trials for the same indication that do not have such patient eligibility criteria;
- the size of the study population required for analysis of the trial's primary endpoints;
- the proximity of patients to a trial site;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- · competing clinical trials for similar therapies or targeting patient populations meeting our patient eligibility criteria;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies and product candidates;
- · our ability to obtain and maintain patient consents; and
- · the risk that patients enrolled in clinical trials will not complete such trials, for any reason.

For example, because patients with early stages of DR often lack symptoms, it may be challenging to identify and enroll patients at early stages of disease that may be required for a clinical trial. Our inability to enroll a sufficient number of patients for our clinical trials could result in significant delays or may require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, delay or halt the development of and approval processes for our product candidates and jeopardize our ability to commence sales of and generate revenues from our product candidates, which may harm our business and results of operation.

### Our clinical trials may fail to demonstrate substantial evidence of the safety and efficacy or durability of our product candidates, which would prevent, delay or limit the scope of regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical studies and clinical trials that our product candidates are both safe and effective for use in each target indication. For those product candidates that are subject to regulation as biological drug products, we will need to demonstrate that they are safe, pure, and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use. This is especially true for anti-VEGF biologic agents where Lucentis and EYLEA are established products with accepted safety profiles.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies of our product candidates may not be predictive of the results of early-stage or later-stage clinical trials, and results of early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. The results of clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials. The results of clinical trials in one set of patients or disease indications may not be predictive of those obtained in another. In some instances, there can be significant variability in safety, efficacy or durability results between different clinical trials of the same product candidate due to numerous factors, including changes in trial

procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. Product candidates in later stages of clinical trials may fail to show the desired safety, efficacy and durability profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

We may be unable to design and execute clinical trials that supports marketing approval. We cannot be certain that our planned clinical trials or any other future clinical trials will be successful. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA or foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates. Even if regulatory approval is secured for any of our product candidates, the terms of such approval may limit the scope and use of our product candidate, which may also limit its commercial potential.

# We may not be successful in our efforts to continue to create a pipeline of product candidates or to develop commercially successful products. If we fail to successfully identify and develop additional product candidates, our commercial opportunity may be limited.

One of our strategies is to identify and pursue clinical development of additional product candidates through our ABC Platform. Our ABC Platform may not produce a pipeline of viable product candidates, or our competitors may develop platform technologies that render our ABC Platform obsolete or less attractive. Our research methodology may be unsuccessful in identifying potential product candidates, or our potential product candidates may be shown to have harmful side effects or may have other characteristics that may make them unmarketable or unlikely to receive marketing approval. Identifying, developing, obtaining regulatory approval and commercializing additional product candidates for the treatment of retinal diseases will require substantial additional funding beyond the net proceeds of this offering and is prone to the risks of failure inherent in drug development. If we are unable to successfully identify, acquire, develop and commercialize additional product candidates, our commercial opportunity may be limited.

#### We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may retain their market share with existing drugs, or achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any product candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug products is highly competitive. We may face competition with respect to any product candidates that we 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.

There are a number of large pharmaceutical and biotechnology companies that are currently pursuing the development of products for the treatment of the retinal disease indications for which we have product candidates, including wet AMD and DR. Certain of our competitors have commercially approved products for

the treatment of retinal diseases that we are pursuing or may pursue in the future, including Roche and Regeneron for the treatment of wet AMD and DR. These drugs are well established therapies and are widely accepted by physicians, patients and third-party payors, which may make it difficult to convince these parties to switch to KSI-301. Companies that we are aware are developing therapeutics in the retinal disease area include large companies with significant financial resources, such as Roche, Novartis, Bayer and Regeneron, Allergan, Mylan and Momenta. In addition to competition from other companies targeting retinal indications, any products we may develop may also face competition from other types of therapies, such as gene-editing therapies and drug delivery devices.

Many of our current or potential competitors, either alone or with their strategic partners, 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 or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. 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 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 any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of retinal disease indications, which could give such products significant regulatory and market timing advantages over any of our product candidates. Our competitors may report to their products more rapidly than we may obtain approval for ours. Additionally, products or technologies developed by our competitors may reder our potential product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. For more information regarding potential disputes concerning intellectual property, see the subsection titled "Risks Related to Our Intellectual Property."

#### The manufacture of our product candidates is highly complex and requires substantial lead time to produce.

Manufacturing our product candidates involves complex processes, including developing cells or cell systems to produce the biologic, growing large quantities of such cells, and harvesting and purifying the biologic produced by them. These processes require specialized facilities, highly specific raw materials and other production constraints. As a result, the cost to manufacture a biologic is generally far higher than traditional small molecule chemical compounds, and the biologics manufacturing process is less reliable and is difficult to reproduce. Because of the complex nature of our products, we need to oversee manufacture of multiple components that require a diverse knowledge base and specialized personnel.

Moreover, unlike chemical pharmaceuticals, the physical and chemical properties of a biologic such as our product candidates generally cannot be adequately characterized prior to manufacturing the final product. As a result, an assay of the finished product is not sufficient to ensure that the product will perform in the intended manner. Accordingly, we expect to employ multiple steps to attempt to control our manufacturing process to assure that the process works and the product or product candidate is made strictly and consistently in compliance with the process

Manufacturing biologics is highly susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, improper storage or transfer, inconsistency in yields and variability in product characteristics. Even minor deviations from normal manufacturing, distribution or storage processes could result in reduced production yields, product defects and

other supply disruptions. Some of the raw materials required in our manufacturing process are derived from biological sources. Such raw materials are difficult to procure and may also be subject to contamination or recall. A material shortage, contamination, recall or restriction on the use of biologically derived substances in the manufacture of our product candidates could adversely impact or disrupt commercialization. Production of additional drug substance and drug product for any of our product candidates may require substantial lead time. For example, currently any new large-scale batches of KSI-301 would require at least 12 months to manufacture. In the event of significant product loss and materials shortages, we may be unable to produce adequate amounts of our product candidates or products for our operational needs.

Further, as product candidates are developed through preclinical studies to late-stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, are altered along the way in an effort to optimize processes and results. Such changes carry the risk that they will not achieve these intended objectives, and any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials.

These challenges are magnified by the international nature of our supply chain, which, for KSI-301, requires drug substance and drug product sourced from single source suppliers from China, Japan, the United Kingdom, and Switzerland.

#### We have no experience manufacturing any of our product candidates at a commercial scale. If we or any of our third-party manufacturers encounter difficulties in production, or fail to meet rigorously enforced regulatory standards, our ability to provide supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or stopped, or we may be unable to establish a commercially viable cost structure.

In order to conduct clinical trials of our product candidates, or supply commercial products, if approved, we will need to manufacture them in small and large quantities. Our third-party manufacturer has made only a limited number of lots of KSI-301 to date and has not made any commercial lots. The manufacturing processes for KSI-301 have never been tested at commercial scale, the process validation requirement (the requirement to consistently produce the active pharmaceutical ingredient used in KSI-301 in commercial quantities and of specified quality on a repeated basis and document its ability to do so) has not yet been satisfied. Our manufacturing partners may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If our manufacturing partners are unable to successfully scale up the manufacture of our product candidates in sufficient quality, the development, testing and clinical trials of our product candidates may be delayed or become infeasible, and regulatory approval or commercial launch of any resulting product may be delayed or not obtained, which could significantly harm our business. The same risks would apply to any internal manufacturing facilities, should we in the future decide to build internal manufacturing capacity.

In addition, the manufacturing process for any products that we may develop is subject to FDA, EMA, CDA and foreign regulatory authority approval processes and continuous oversight. We will need to contract with manufacturers who can meet all applicable FDA, EMA, CDA and foreign regulatory authority requirements, including complying with current good manufacturing practices, or cGMPs, on an ongoing basis. If we or our third-party manufacturers are unable to reliably produce products to specifications acceptable to the FDA, EMA, CDA or other regulatory authorities, we may not obtain or maintain the approvals we need to commercialize such products. Even if we obtain regulatory approval for any of our product candidates, there is no assurance that either we or our CMOs will be able to manufacture the approved product to specifications acceptable to the FDA, EMA, CDA or other product, candidates, or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product, or to meet potential future demand. Any of these challenges could delay completion of clinical trials, require bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidate, impair commercialization efforts, increase our cost of goods, and have an adverse effect on our business, financial condition, results of operations and growth prospects.

# If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any product candidates we may develop, we may not be successful in commercializing those product candidates 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 pharmaceutical products. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing and commercial support infrastructure to sell, or participate in sales activities with our collaborators for, some of our product candidates if and when they are approved.

There are risks involved with both establishing our own commercial capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force or reimbursement specialists is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and other commercialization 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 commercialization personnel.

Factors that may inhibit our efforts to commercialize any approved product on our own include:

- our inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs and other support personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price our products at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our products to segments of the patient population;
- 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 commercialization organization.

If we enter into arrangements with third parties to perform sales, marketing, commercial support and distribution services, our product revenue or the profitability of product revenue may be lower than if we were to market and sell any products we may develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to commercialize our product candidates or may be unable to do so on terms that are favorable to us. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates if approved.

# Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

The commercial success of any of our product candidates will depend upon its degree of market acceptance by physicians, patients, third-party payors and others in the medical community. Even if any product candidates we may develop receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors, and others in the medical community. The degree of market acceptance

of any product candidates we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in pivotal clinical trials and published in peer-reviewed journals;
- the potential and perceived advantages compared to alternative treatments;
- the ability to offer our products for sale at competitive prices;
- · the ability to offer appropriate patient access programs, such as co-pay assistance;
- · the extent to which physicians recommend our products to their patients;
- · convenience and ease of dosing and administration compared to alternative treatments;
- the clinical indications for which the product candidate is approved by FDA, EMA, CDA or other regulatory agencies;
- product labeling or product insert requirements of the FDA, EMA, CDA or other comparable foreign regulatory authorities, including any limitations, contraindications or warnings contained in a product's approved labeling;
- · restrictions on how the product is distributed;
- · the timing of market introduction of competitive products;
- · publicity concerning our products or competing products and treatments;
- the strength of marketing and distribution support;
- · sufficient third-party coverage or reimbursement; and
- · the prevalence and severity of any side effects.

If any product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenue, and we may not become profitable.

## Even if we are able to commercialize any product candidates, such products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drugs vary widely from country to country. In the United States, recently enacted 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 revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if any product candidates we may develop obtain marketing approval.

Our ability to successfully commercialize any products that we may develop also will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers, 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. Government authorities currently impose mandatory discounts for certain patient groups, such as Medicare, Medicaid and Veterans Affairs, or VA, hospitals, and may seek to increase such discounts at any time. Future regulation may negatively impact the price of our products, if approved. 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. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, that the level of reimbursement will be sufficient.

Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. In order to get reimbursement, physicians may need to show that patients have superior treatment outcomes with our products compared to standard of care drugs, including lower-priced generic versions of standard of care drugs. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the medicine is approved by the FDA, EMA, CDA or other comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale, and distribution. 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 profitable payment rates from both government-funded and private payors for any approved products we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize product candidates, and our overall financial condition.

# Our product candidates for which we intend to seek approval as biologic products may face competition from biological products that are biosimilar to or interchangeable with our product candidates sooner than anticipated.

The Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning are subject to uncertainty.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than

anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

### If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk when and if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit testing and commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- · decreased or interrupted demand for our products;
- injury to our reputation;
- · withdrawal of clinical trial participants and inability to continue clinical trials;
- · initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- · substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- · the inability to commercialize any product candidate; and
- · a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with collaborators. Our insurance policies may have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

#### **Risks Related to Regulatory Approval and Other Legal Compliance Matters**

The regulatory approval processes of the FDA, EMA, CDA and comparable foreign regulatory authorities are lengthy, time consuming, and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our product candidates, we will be unable to generate product revenue and our business will be substantially harmed.

The time required to obtain approval by the FDA, EMA, CDA and comparable foreign regulatory authorities is unpredictable, typically takes many years following the commencement of clinical trials and



depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve 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. We have not submitted for or obtained regulatory approval for any product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Applications for our product candidates could fail to receive regulatory approval for many reasons, including but not limited to the following:

- the FDA, EMA, CDA or comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;
- the FDA, EMA, CDA or comparable foreign regulatory authorities may determine that our product candidates are not safe and effective, only
  moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing
  approval or prevent or limit commercial use of our products;
- the population studied in the clinical program may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- we may be unable to demonstrate to the FDA, EMA, CDA or comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication, when compared to the standard of care, is acceptable;
- the FDA, EMA, CDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA, BLA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA, EMA, CDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, EMA, CDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations, and prospects.

# We plan to conduct clinical trials for our product candidates outside the United States, and the FDA, EMA, CDA and applicable foreign regulatory authorities may not accept data from such trials.

We plan to conduct one or more of our clinical trials outside the United States, including in Europe and in China. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA, EMA, CDA or applicable foreign regulatory authority may be subject to certain conditions. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (1) the data are applicable to the U.S. population and U.S. medical practice and (2) the trials were performed by clinical investigators of recognized competence and pursuant to cGCP regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering,

must be met. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, EMA, CDA or any applicable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction, including any trials that we may conduct in China. If the FDA, EMA, CDA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming, would delay aspects of our business plan and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

# Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA, EMA or CDA grants marketing approval of a product candidate, we would not be permitted to manufacture, market or promote the product candidate in other countries unless and until comparable regulatory authorities in foreign jurisdictions had approved the candidate for use in their countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials. There can be no assurance that any clinical trials conducted in one jurisdiction will be accepted by regulatory authorities in other jurisdictions.

Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we or any collaborator we work with fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

#### Even if we obtain regulatory approval for a product candidate, our products will remain subject to extensive regulatory scrutiny.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements imposed by the FDA, EMA, CDA and comparable foreign regulatory authorities, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, BLA or marketing authorization application, or MAA. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we receive for our product candidates will be subject to limitations on the approved indicated uses for which the product may be marketed and promoted or to the conditions of approval (including the requirement to implement a Risk Evaluation and Mitigation Strategy), or contain requirements for potentially costly post-marketing testing. We will be required to report certain adverse reactions and production problems, if any, to the FDA, EMA, CDA and comparable foreign regulatory authorities. Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance. The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing and promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved

labeling. We will have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have approval. The holder of an approved NDA, BLA or MAA must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval was obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our products. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- · issue warning letters that would result in adverse publicity;
- · impose civil or criminal penalties;
- · suspend or withdraw regulatory approvals;
- suspend any of our ongoing clinical trials;
- · refuse to approve pending applications or supplements to approved applications submitted by us;
- · impose restrictions on our operations, including closing our contract manufacturers' facilities;
- · seize or detain products; or
- · require a product recall.

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

#### Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain international jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Affordable Care Act, or ACA, was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars, 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, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government's comparative effectiveness research. Recent changes in the U.S. administration could lead to repeal of or changes in some or all of the ACA, and complying with any new legislation or reversing changes implemented under the ACA could be time-intensive and expensive, resulting in a material adverse effect on our business. Until the ACA is fully implemented or there is more certainty concerning the future of the ACA, it will be difficult to predict its full impact and influence on our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in 2013, and will remain in effect through 2025 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- · the demand for our product candidates, if we obtain regulatory approval;
- our ability to receive or set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- · the level of taxes that we are required to pay; and
- the availability of capital.

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, lower reimbursement and new payment methodologies. This could lower the price that we receive for any approved product. Any denial in coverage or reduction in reimbursement from Medicare or other government-funded programs may result in a similar denial or reduction in payments from private payors, which may prevent us from being able to generate sufficient revenue, attain profitability or commercialize our product candidates, if approved.

# Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with the laws of the FDA, EMA, CDA and other comparable foreign regulatory authorities; provide true, complete and accurate information to the FDA, EMA, CDA and other comparable foreign regulatory authorities; provide true, complete and accurate information to the FDA, EMA, CDA and other comparable foreign regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. If we obtain FDA approval of any of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education and other business arrangements in the healthcare industry are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and coursion, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. In connection with this offering, we are adopting a code of business conduct and ethics that applies to all our employees, including management, and our directors. However, it is not always possible to identify and deter mis

risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

# If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.

If we obtain FDA approval for any of our product candidates and begin commercializing those products in the United States, our operations will be subject to various federal and state fraud and abuse laws. The laws that may impact our operations include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or
  paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in
  return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which
  payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or
  entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition,
  the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a
  false or fraudulent claim for purposes of the False Claims Act;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil "qui tam" or "whistleblower" actions, against individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other third-party payors that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective
  implementing regulations, which impose requirements on certain covered healthcare providers, health plans and healthcare clearinghouses as
  well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health
  information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;
- the federal Physician Payment Sunshine Act, created under the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the U.S. Department of Health and Human Services under the Open Payments Program, information related to payments or other transfers of value made to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and

analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state 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 that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; 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 may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that some of our business activities could, despite our efforts to comply, be subject to challenge under one or more of such laws. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

# If we or any contract manufacturers and suppliers we engage fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We and any contract manufacturers and suppliers we engage are subject to numerous federal, state and local environmental, health, and safety laws, regulations, and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air and water; and employee health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste. 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. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities. We also could incur significant costs associated with civil or criminal fines and penalties.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research, product development and manufacturing efforts. In addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty, and general liability insurance policies specifically exclude coverage for

damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

#### Our business activities may be subject to the Foreign Corrupt Practices Act, or FCPA, and similar anti-bribery and anti-corruption laws.

Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate or may operate in the future, including the U.K. Bribery Act. The FCPA generally prohibits offering, promising, giving or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the health care providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, our dealings with these prescribers and purchasers are subject to regulation under the FCPA. Recently the Securities and Exchange Commission, or SEC, and Department of Justice have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There can be no assurance that all of our employees, agents, contractors or collaborators, or these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, the closing down of our facilities, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our products in one or more countries and could materially damage our reputation, our band, our ability to attract and retain employees, and our business, prospects, operating results, and financial condition.

#### **Risks Related to Our Reliance on Third Parties**

#### We expect to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research or testing.

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct some aspects of our research, preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If we need to enter into alternative arrangements, it would delay our product development activities.

Our reliance on these third parties for research and 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 cGCPs for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We are also required to register ongoing clinical trials and to post the results of completed clinical trials on a government-sponsored database within certain 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 any product candidates we may develop and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines.

We also expect to 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 any product candidates we may develop or commercialization of our medicines, producing additional losses and depriving us of potential product revenue.

We contract with third parties for the manufacture of materials for our product candidates and preclinical studies and expect to continue to do so for clinical trials and for commercialization of any product candidates that we may develop. This reliance on third parties carries and may increase the risk that we will not have sufficient quantities of such materials, product candidates or any medicines that we may develop and commercialize, or that such supply will not be available to us at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not have any manufacturing facilities. We currently rely exclusively on a third-party manufacturer, Lonza AG, for the manufacture of our materials for preclinical studies and clinical trials and expect to continue to do so for preclinical studies, clinical trials and for commercial supply of any product candidates that we may develop.

We may be unable to establish any further agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the possible breach of the manufacturing agreement by the third party or us;
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us;
- the possible early termination of the agreement by us at a time that requires us to pay a cancellation fee;
- · reliance on the third party for regulatory compliance, quality assurance, safety and pharmacovigilance and related reporting; and
- · the inability to produce required volume in a timely manner and to quality standards.

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 clinical holds on our trials, sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocations, seizures or recalls of product candidates or medicines, operating restrictions, and criminal prosecutions, any of which could significantly and adversely affect supplies of our medicines and harm our business, financial condition, results of operations, and prospects.

Any medicines 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.

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 any of our product candidates. If any one of our current contract manufacturers cannot perform as agreed, we may be required to replace that manufacturer and may incur added costs and delays in identifying and qualifying any such replacement. Furthermore, securing and reserving production capacity with contract manufacturers may result in significant costs.

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

# Reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Reliance on third parties to conduct clinical trials, assist in research and development and to manufacture our product candidates, will at times require us to share trade secrets with them. We seek to protect our proprietary technology by in part entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's independent discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

# We rely on third-party suppliers for key raw materials used in our manufacturing processes, and the loss of these third-party suppliers or their inability to supply us with adequate raw materials could harm our business.

We rely on third-party suppliers for the raw materials required for the production of our product candidates. Our reliance on these third-party suppliers and the challenges we may face in obtaining adequate supplies of raw materials involve several risks, including limited control over pricing, availability, quality and delivery schedules. As a small company, our negotiation leverage is limited and we are likely to get lower priority than our competitors who are larger than we are. We cannot be certain that our suppliers will continue to provide us with the quantities of these raw materials that we require or satisfy our anticipated specifications and quality requirements. Any supply interruption in limited or sole sourced raw materials could materially harm our ability to manufacture our product candidates until a new source of supply, if any, could be identified and qualified. We may be unable to find a sufficient alternative supply channel in a reasonable time or on commercially reasonable terms. Any performance failure on the part of our suppliers could delay the development and potential commercialization of our product candidates, including limiting supplies necessary for clinical trials and regulatory approvals, which would have a material adverse effect on our business.

# We may depend on collaborations with third parties for the research, development and commercialization of certain of the product candidates we may develop. If any such collaborations are not successful, we may not be able to realize the market potential of those product candidates.

We may seek third-party collaborators for the research, development and commercialization of certain of the product candidates we may develop. Our likely collaborators for any other collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies, biotechnology companies and academic institutions. If we enter into any such arrangements with any third parties, we will likely have shared or limited control over the amount and timing of resources that our collaborators dedicate to the development or potential commercialization of any product candidates we may seek to develop with them. Our ability to generate revenue from these arrangements with commercial entities will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements. We cannot predict the success of any collaboration that we enter into.

Collaborations involving our product candidates we may develop, pose the following risks to us:

- collaborators generally have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not properly obtain, maintain, enforce or defend intellectual property or proprietary rights relating to our product candidates
  or may use our proprietary information in such a way as to expose us to potential litigation or other intellectual property related proceedings,
  including proceedings challenging the scope, ownership, validity and enforceability of our intellectual property;

- collaborators may own or co-own intellectual property covering our product candidates that result from our collaboration with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property or such product candidates;
- · disputes may arise with respect to the ownership of intellectual property developed pursuant to collaborations;
- we may need the cooperation of our collaborators to enforce or defend any intellectual property we contribute to or that arises out of our collaborations, which may not be provided to us;
- · collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development, or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborators may decide not to pursue development and commercialization of any product candidates we develop or may elect not to continue
  or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available
  funding or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial, 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 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;
- collaborators with marketing and distribution rights to one or more product candidates may not commit sufficient resources to the marketing and distribution of such product candidates;
- · we may lose certain valuable rights under circumstances identified in our collaborations, including if we undergo a change of control;
- collaborators may undergo a change of control and the new owners may decide to take the collaboration in a direction which is not in our best interest;
- collaborators may become party to a business combination transaction and the continued pursuit and emphasis on our development or commercialization program by the resulting entity under our existing collaboration could be delayed, diminished or terminated;
- collaborators may become bankrupt, which may significantly delay our research or development programs, or may cause us to lose access to
  valuable technology, know-how or intellectual property of the collaborator relating to our products, product candidates;
- key personnel at our collaborators may leave, which could negatively impact our ability to productively work with our collaborators;
- collaborations may require us to incur short and long-term expenditures, issue securities that dilute our stockholders, or disrupt our management and business;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates or our ABC Platform; and
- · collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all.

We may face significant competition in seeking appropriate collaborations. Recent business combinations among biotechnology and pharmaceutical companies have resulted in a reduced number of potential collaborators. In addition, the negotiation process is time-consuming and complex, and we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate or 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 increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop product candidates or bring them to market and generate product revenue.

If we enter into collaborations to develop and potentially commercialize any product candidates, we may not be able to realize the benefit of such transactions if we or our collaborator elect not to exercise the rights granted under the agreement or if we or our collaborator are unable to successfully integrate a product candidate into existing operations and company culture. In addition, if our agreement with any of our collaborators terminates, our access to technology and intellectual property licensed to us by that collaborator may be restricted or terminate entirely, which may delay our continued development of our product candidates utilizing the collaborator's technology or intellectual property or require us to stop development of those product candidates completely. We may also find it more difficult to find a suitable replacement collaborator or attract new collaborators, and our development programs may be delayed or the perception of us in the business and financial communities could be adversely affected. Any collaborator may also be subject to many of the risks relating to product development, regulatory approval, and commercialization described in this "Risk Factors" section, and any negative impact on our collaborators may adversely affect us.

#### **Risks Related to Our Intellectual Property**

#### If we are unable to obtain and maintain patent protection for any product candidates we develop or for our ABC Platform, our competitors could develop and commercialize products or technology similar or identical to ours, and our ability to successfully commercialize any product candidates we may develop, and our technology may be adversely affected.

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 ABC Platform and any proprietary product candidates and other technologies we may develop. We seek to protect our proprietary position by in-licensing intellectual property and filing patent applications in the United States and abroad relating to our ABC Platform, product candidates and other technologies that are important to our business. Given that the development of our technology and product candidates is at an early stage, our intellectual property portfolio directed to certain aspects of our technology and product candidates is also at an early stage. We have filed or intend to file patent applications on core aspects of our technology and product candidates; however, there can be no assurance that any such patent applications will issue as granted patents. Furthermore, in some cases, we only have filed provisional patent applications on certain aspects of our technology and product candidates, and none of these provisional patent applications is eligible to become an issued patent until, among other things, we file a non-provisional patent application within 12 months of the filing date of the applicable provisional patent application. Any failure to file a non-provisional patent application within this timeline could cause us to lose the ability to obtain patent protection for the inventions disclosed in the associated provisional patent applications. Furthermore, in some cases, we may not be able to obtain issued claims covering compositions relating to our ABC Platform and product candidates, as well as other technologies that are important to our business, and instead may need to rely on filing patent applications with claims covering a method of use and/or method of manufacture for protection of such ABC Platform, product candidates and other technologies. There can be no assurance that any such patent applications will issue as granted patents, and even if they do issue, such patent claims may be insufficient to prevent third parties, such as our competitors, from utilizing our technology. Any failure to obtain or maintain patent protection with respect to our ABC Platform and product candidates could have a material adverse effect on our business, financial condition, results of operations, and prospects.

#### If any of our patent applications does not issue as a patent in any jurisdiction, we may not be able to compete effectively.

Changes in either the patent laws or their interpretation in the United States and other countries may diminish our ability to protect our inventions, and obtain, maintain and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our owned and licensed patents. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection from competitors or other third parties.

The patent prosecution process is expensive, time-consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output in time to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our inventions and the prior art allow our inventions to be patentable over the prior art. In addition, our own fixed applications may become prior art against our current or future patent applications. Furthermore, 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, and in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in any of our patents or pending patent applications, or that we were the first to file for patent protection of such inventions.

# If the scope of any patent protection we obtain is not sufficiently broad, or if we lose any of our patent protection, our ability to prevent our competitors from commercializing similar or identical technology and product candidates would be adversely affected.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. 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 not result in patents being issued that protect our ABC Platform, product candidates or other technologies or that effectively prevent others from commercializing competitive technologies and product candidates.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we license or own currently or in the future issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. Any patents may be challenged, narrowed, circumvented, rendered unenforceable or invalidated by third parties. Consequently, we do not know whether our ABC Platform, product candidates or other technologies will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner which could materially adversely affect our business, financial condition, results of operations and prospects.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. We may be subject to a third party preissuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, revocation, reexamination, post-grant and inter partes review, or interference proceedings or other similar proceedings challenging our patent rights. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate or render unenforceable, our patent

rights, allow third parties to commercialize our ABC Platform, product candidates or other technologies 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. Moreover, we may have to participate in interference proceedings declared by the USPTO to determine priority of invention or in post-grant challenge proceedings, such as oppositions and other challenges in a foreign patent office or administrative tribunal, that challenge our or our licensor's priority of invention or other features of patentability with respect to our owned or in-licensed patents and patent applications. Such challenges may result in loss of patent rights, loss of exclusivity, or in patent claims being narrowed, invalidated, or held unenforceable, 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 ABC Platform, product candidates and other technologies. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us.

In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

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

Filing, prosecuting and defending patents relating to our ABC Platform, product candidates and other technologies 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 U.S. laws. 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 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, costly or impossible 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 are 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.

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

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned or licensed patents and applications. The USPTO and various non-U.S. government agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. In some cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. Payment within these late fee windows may be employed in order to simplify the payment of these fees generally. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent application, resulting in a partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market with similar or identical products or technology, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, while not relevant for KSI-301, if we rely on a different product, its development could involve the use of government funds, which can require additional compliance aspects to make certain all rights are transferred to or remain with us.

# Issued patents may be challenged or invalidated, and recent changes in U.S. patent law have diminished and may further diminish the value of patents in general. We rely on patents to protect our products, and any diminishment in the scope or value of our patents would adversely affect our business.

If we initiated legal proceedings against a third party to enforce a patent directed to our ABC Platform, product candidates or other technologies, the defendant could allege that such patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and unenforceability are commonplace. Grounds for a validity challenge include alleged failures to meet any of several statutory requirements, including obviousness, lack of novelty, lack of written description, or non-enablement. Grounds for an unenforceability challenge include an allegation that someone connected with prosecution of the patent withheld material information from the USPTO with an intent to deceive the USPTO, or made a misleading statement, during prosecution. The filing of a legal proceeding could also result in the third party challenging the patent at the USPTO, such as in post-grant and inter partes review.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. For patent filings beginning in March 2013, the United States employs a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. Under the current patent laws, a third party that files a patent application in the USPTO before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we were the first to either (1) file any patent application related to our ABC Platform, product candidates or other technologies or (2) invent any of the inventions claimed in our or our licensor's patents or patent applications.

Changes to U.S. patent laws since 2011 also include allowing third party submissions of prior art to the USPTO during patent prosecution and additional procedures for attacking the validity of a patent through USPTO administered post-grant proceedings, including re-examination, post-grant review, interference proceedings and derivation proceedings. Some of these changes apply to patents issued prior to 2011. These and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings) could result in the revocation of, cancellation of or amendment to our patents in such a way that they no longer cover our ABC Platform, product candidates or other technologies. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standards applied in United States federal courts that apply to actions seeking to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding

sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if challenged in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not otherwise have been invalidated if first challenged by the third party as a defendant in a district court action.

As compared to intellectual property-reliant companies generally, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. These rulings have created uncertainty with respect to the validity and enforceability of patents, even once obtained. Depending on future actions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

In addition, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

Any future changes to patent laws could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued patents. If a third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our ABC Platform, product candidates or other technologies. Increased uncertainty with respect to, or loss of, patent protection would have a material adverse impact on our business, financial condition, results of operations and prospects.

#### If we do not obtain patent term extension and data exclusivity for any product candidates we may develop, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any product candidates we may develop, one or more of our owned or in-licensed U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent term extension of up to five years as compensation for 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, only one patent 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. Similar extensions as compensation for patent term lost during regulatory review processes are also available in certain foreign countries and territories, such as in Europe under a Supplementary Patent Certificate. Patent term extension in the United States and/or foreign countries and territories may not be available if, among other things, we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to the expiration of relevant patents, or otherwise fail to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or the term of any such extension received is shorter than what we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations and prospects could be materially harmed.

### We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor or owner or co-owner. For example, we may have inventorship disputes arise from conflicting obligations of

employees, collaborators, consultants or others who are involved in developing our ABC Platform, product candidates or other technologies. Litigation may be necessary to defend against these and other claims challenging inventorship or our ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our ABC Platform, product candidates and other technologies. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

#### 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 ABC Platform, product candidates and other technologies, we also rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information and to maintain our competitive position. Trade secrets and know-how can be difficult to protect. Over time, we expect our trade secrets and know-how to be disseminated within the industry through independent development, the publication of journal articles describing the methodology and the movement of personnel from academic to industry scientific positions.

We seek to protect these trade secrets and other proprietary technology, 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, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants, train our employees not to bring or use proprietary information or technology from former employers to us or in their work and remind former employees when they leave their employment of their confidentiality obligations to us. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes. Despite our 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 contain such breaches or disclosures or obtain adequate remedies for such breaches. 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 or other third party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed without the protection of a confidentiality agreement found unenforceable by relevant courts or independently developed by a competitor or other third party, our competitive position would be materially and adversely harmed.

# We may be subject to claims that our employees, consultants, or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Many of our employees, consultants and advisors are currently or were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors and potential competitors. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these individuals have improperly used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or 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, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects. Where post-filing date patent assignments are not executed by an inventor, it is our practice to employ and record the assignment provision that can be found in the employee's employment agreement. This is done when possible, and when the intellectual property is of interest to us.

# Third-party claims of intellectual property infringement, misappropriation or other violation against us or our collaborators may prevent or delay the development and commercialization of our ABC Platform, product candidates and other technologies.

The field of discovering treatments for retinal diseases is highly competitive and dynamic. Due to the focused research and development that is taking place in this field by several companies, including us and our competitors, the intellectual property landscape is in flux, and it may remain uncertain in the future. As such, there may be significant intellectual property related litigation and proceedings relating to our owned, and other third party, intellectual property and proprietary rights in the future.

Our commercial success depends in part on our and our collaborators' ability to avoid infringing, misappropriating and otherwise violating the patents and other intellectual property rights of third parties. There is a substantial amount of complex litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings challenging patents, including interference, derivation and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. As discussed above, due to changes in U.S. law referred to as patent reform, new procedures including *inter partes* review and post-grant review have been implemented. As stated above, this reform adds uncertainty to the possibility of challenge to our patents in the future.

Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist relating to ABC technology and in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our ABC Platform, product candidates and other technologies may give rise to claims of infringement of the patent rights of others. We cannot assure you that our ABC Platform, product candidates and other technologies that we have developed, are developing or may develop in the future will not infringe existing or future patents owned by third parties. We may not be aware of patents that have already been issued or that a third party, including a competitor in the fields in which we are developing our ABC Platform, product candidates or other technologies. Such a dispute may concern claims to compositions, formulations, methods of manufacture or methods of use or treatment that cover our ABC Platform, product candidates or other technologies, could be found to be infringed by our ABC Platform, product candidates or other technologies. In addition, because patent applications can take many years to issue, there may be currently pending patent applications that later result in issued patents that our ABC Platform, product candidates or other technologies.

Third parties may have patents or obtain patents in the future and claim that the manufacture, use or sale of our ABC Platform, product candidates or other technologies infringes these patents. If a third party alleges that we infringe their patents or that we are otherwise employing their proprietary technology without authorization and initiates litigation against us, a court of competent jurisdiction could hold that such patents are valid, enforceable and infringed by our ABC Platform, product candidates or other technologies, even if we believe such claims are without merit. In that event, the successful plaintiff may be able to block our ability to commercialize the applicable product candidate or technology unless we obtain a license under the applicable patents, or such patents expire or are finally determined to be invalid or unenforceable. Such a license may not be available on commercially reasonable terms or at all. Even if we are able to obtain a license, the license would

likely obligate us to pay license fees, royalties or both. Any license granted to us might be nonexclusive, which could result in our competitors gaining access to the same intellectual property. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, we may be unable to commercialize our ABC Platform, product candidates or other technologies, or our commercialization efforts may be significantly delayed, which could in turn significantly harm our business.

We are aware of a number of patents and applications that are directed to one or more aspects of KSI-301. Our intent is to maintain our development efforts under 35 U.S.C. Section 271(e)(1) (which provides a safe harbor from patent infringement claims related to certain drug development activities) through to at least the launch of any KSI-301 product. As such, we do not intend to launch KSI-301 when any valid patent is still in force. We are aware of at least one pending application with claims that are directed to some aspect of KSI-301, and that could, if issued, result in a patent term beyond our intended launch date of KSI-301. If this were to occur, we may challenge the validity of the claims, obtain a license, modify KSI-301, or delay launch.

If we choose to further the pipeline and develop a different product, such a product would be delayed until the expiration of any valid patent that is still in force on such product. Alternatively, our options for addressing any such patents relating to these non-KSI-301 products would include the following: challenge the validity of the claims, obtain a license, or modify the non-KSI-301 product.

Defending against infringement claims, regardless of their merit, would involve substantial litigation expense, would be a substantial diversion of management and other employee resources from our business and may adversely impact our reputation. We may be subject to an injunction that prevents or delays us from commercializing our ABC Platform technology, product candidates or other technologies during ongoing litigation even if we ultimately prevail in the litigation proceedings or the litigation is settled in our favor. We may be subject to an injunction that prevents or delays us from commercializing our ABC Platform, product candidates or other technologies during ongoing litigation even if we ultimately prevail in the litigation is settled in our favor. In the event of a successful claim of infringement against us, we may be enjoined from further developing or commercializing our infringing ABC Platform, product candidates or other technologies. In addition, we may have to pay substantial damages (including treble damages and attorneys' fees for willful infringement) obtain one or more licenses from third parties, pay royalties and/or redesign our infringing product candidates or technologies, which may be impossible or require substantial time and monetary expenditure. If we were unable to further develop and commercialize our ABC Platform, product candidates or other technologies, it would harm our business significantly.

Engaging in litigation to defend against third parties alleging that we have infringed, misappropriated or otherwise violated their patents or other intellectual property rights is very expensive, particularly for a company of our size, and time-consuming. Some of our competitors may be able to sustain the costs of litigation or administrative proceedings more effectively than we can because of greater financial resources. Patent litigation and other proceedings may also absorb significant management time. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings against us could impair our ability to compete in the marketplace. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition or results of operations.

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

Competitors may infringe our patents or the patents of our licensing partners, or we may be required to defend against claims of infringement. If we assert our intellectual property against others, it could increase the likelihood that our patents or the patents of our licensing partners become involved in inventorship, priority or validity disputes. As discussed above, countering or defending against such claims can be expensive and time consuming. In an infringement proceeding, a court may decide that a patent owned or in-licensed by us is invalid or unenforceable, the other party's use of our patented technology falls under the safe harbor to patent infringement under 35 U.S.C. §271(e)(1), or may refuse to stop the other party from using the technology at issue on the grounds that our owned and in-licensed patents do not cover the technology in question. An adverse result

in any litigation proceeding could put one or more of our owned or in-licensed patents at risk of being invalidated, rendered unenforceable or interpreted narrowly. 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 could be compromised by disclosure during this type of litigation.

Even if we prevail in asserting our intellectual property, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our 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 or to assert all claims we believe to be viable. Some of our competitors may be able to sustain the costs of such litigation or proceedings resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

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

We rely on trademarks, service marks, tradenames and brand names. We cannot assure you that our trademark applications will be approved. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, any registered or unregistered trademarks or trade names that we currently have or may in the future acquire may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademarks or trade names. Further, we do not own any registered trademarks for the marks "KODIAK" or "KODIAK SCIENCES" in the United States. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We engage a third party watching service to monitor use by third parties of names that are identical or similar to our name. We have identified at least two companies that are using names that we continue to monitor. If we deem it appropriate, we may decide to take action with respect to those companies. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and prospects.

#### Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our product candidates or utilize similar technology but that are not covered by the claims of the patents that we may license or own;
- we, or our current or future licensors or collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or own now or in the future;

- we, or our current or future licensors or collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- it is possible that our current or future pending owned or licensed patent applications will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors or other third parties;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- · the patents of others may harm our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects.

#### **Risks Related to Our Operations**

# We are highly dependent on our key personnel, and if we are not successful in attracting, motivating and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract, motivate and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management, particularly our Chief Executive Officer, Dr. Victor Perlroth, and our scientific and medical personnel. The loss of the services provided by any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements, could result in delays in the development of our product candidates and harm our business.

We conduct our operations at our facility in Palo Alto, California, in a region that is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel is intense and the turnover rate can be high, which may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. We expect that we may need to recruit talent from outside of our region and doing so may be costly and difficult.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided restricted stock and stock option grants, including early exercise stock options exercisable for restricted stock that vest over time. The value to employees of these equity grants that vest over time may be significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain "key man" insurance policies on the lives of all of these individuals or the lives of any of our other employees. If we are unable to attract, incentivize and retain quality personnel on acceptable terms, or at all, it may cause our business and operating results to suffer.

#### We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing this growth.

As of September 1, 2018, we had 28 employees, all of whom were full-time. As our development plans and strategies develop, and as we transition into operating as a public company, we must add a significant number of

additional managerial, operational, financial and other personnel. Future growth will impose significant added responsibilities on members of management, including:

- · identifying, recruiting, integrating, retaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for our current and future product candidates, while complying with our contractual obligations to contractors and other third parties;
- · expanding our operational, financial and management controls, reporting systems and procedures; and
- · managing increasing operational and managerial complexity.

Our future financial performance and our ability to continue to develop and, if approved, commercialize our product candidates will depend, in part, on our ability to effectively manage any future growth. Our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to manage these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services. There can be no assurance that the services of these independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed, or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, if at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop our product candidates and, accordingly, may not achieve our research, development, and commercialization goals.

# A failure to maintain an effective system of internal control over financial reporting could result in material misstatements of our financial statements in future periods and may impair our ability to comply with the accounting and reporting requirements applicable to public companies.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with U.S. generally accepted accounting principles. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

In the period ended December 31, 2016, we identified a material weakness in our internal control over financial reporting which related to misclassifications of (1) the repurchase and retirement of preferred stock within the treasury stock, additional paid-in capital and stockholders' deficit accounts and (2) certain legal costs within the research and development and general and administrative expense accounts. Although the control deficiency was remediated in 2017, there can be no assurance that we will maintain internal control over financial reporting sufficient to enable us to identify or avoid material weaknesses in the future.

If we engage in acquisitions, in-licensing or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities and subject us to other risks.

We may engage in various acquisitions and strategic partnerships in the future, including licensing or acquiring complementary products, intellectual property rights, technologies or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- · increased operating expenses and cash requirements;
- · the assumption of indebtedness or contingent liabilities;
- the issuance of our equity securities which would result in dilution to our stockholders;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product candidates and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology and/or products sufficient to meet our objectives or even to
  offset the associated transaction and maintenance costs.

In addition, if we undertake such a transaction, we may incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

# Our internal computer systems, or those used by our third-party research institution collaborators, CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants may be vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed, ongoing or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on our third-party research institution collaborators for research and development of our product candidates and other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed, and the further development and commercialization of our product candidates could be delayed.

#### Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our CROs, CMOs, suppliers, and other contractors and consultants, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions, for which we are partly uninsured. In addition, we rely on our third-party research institution collaborators for conducting research and development of our product candidates, and they may be

affected by government shutdowns or withdrawn funding. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

All of our operations including our corporate headquarters are located in a single facility in Palo Alto, California. Damage or extended periods of interruption to our corporate, development or research facilities due to fire, natural disaster, power loss, communications failure, unauthorized entry or other events could cause us to cease or delay development of some or all of our product candidates. Although we maintain property damage and business interruption insurance coverage on these facilities, our insurance might not cover all losses under such circumstances and our business may be seriously harmed by such delays and interruption.

We recently implemented a new enterprise resource planning, or ERP, system as well as other systems as part of our ongoing technology and process improvements. Our ERP system is critical to our ability to accurately maintain books and records and prepare our financial statements. If we encounter unforeseen problems with our ERP system or other systems and infrastructure, our business, operations, and financial results could be adversely affected.

#### Our business is subject to economic, political, regulatory and other risks associated with international operations.

Our business is subject to risks associated with conducting business internationally. Some of our suppliers and collaborative relationships are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- · economic weakness, including inflation or political instability in particular non-U.S. economies and markets;
- · differing and changing regulatory requirements in non-U.S. countries;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- difficulties in compliance with non-U.S. laws and regulations;
- · changes in non-U.S. regulations and customs, tariffs and trade barriers;
- · changes in non-U.S. currency exchange rates and currency controls;
- · changes in a specific country's or region's political or economic environment;
- trade protection measures, import or export licensing requirements or other restrictive actions by U.S. or non-U.S. governments;
- · negative consequences from changes in tax laws;
- · compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- difficulties associated with staffing and managing international operations, including differing labor relations;
- potential liability under the FCPA or comparable foreign laws; and
- · business interruptions resulting from geo-political actions, including war and terrorism or natural disasters.

These and other risks associated with our planned international operations may materially adversely affect our ability to attain profitable operations.

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

As of December 31, 2017, we had federal net operating loss carryforwards, or NOLs, of \$18.1 million, which will begin to expire in 2035. Under Sections 382 and 383 of the United States Internal Revenue Code of

1986, as amended, or the Code, if a corporation undergoes an "ownership change" (generally defined as a greater than 50-percentage-point cumulative change (by value) in the equity ownership of certain stockholders over a rolling three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change taxable income or taxes may be limited. As a result of our most recent private placements and other transactions that have occurred since our incorporation, we may have experienced, and, in connection with this offering, may experience, such an ownership change. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which are outside our control. As a result, our ability to use our pre-change net operating loss carryforwards and other pre-change taxable income or taxes may be subject to limitation. We will be unable to use our NOLs if we do not attain profitability sufficient to offset our available NOLs prior to their expiration.

# Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could affect the tax treatment of our domestic and foreign earnings. Any new taxes could adversely affect our domestic and international business operations, and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, on December 22, 2017, the Tax Cuts and Jobs Act, or Tax Act, was enacted into law with many significant changes to the U.S. tax laws, the consequences of which have not yet been determined. Under the Tax Act, the corporate tax rate will be reduced to 21% from 35% for tax years beginning after December 31, 2017. This will affect the gross amount of our deferred tax assets with a corresponding offset to valuation allowance. The Tax Act also limits the utilization of NOLs arising in tax years beginning after December 31, 2017 to 80% of taxable income per year. However, existing NOLs that arose in years prior to December 31, 2017 are not affected by these provisions. We are currently evaluating the Tax Act and its potential effects on our financial statements. The foregoing items could have a material adverse effect on our business, cash flow, financial condition or results of operations.

#### **Risks Related to This Offering and Ownership of Our Common Stock**

# We do not know whether an active market will develop for our common stock or what the market price of our common stock will be, and, as a result, it may be difficult for you to sell your shares of our common stock.

Before this offering, there was no public trading market for our common stock. If an active market for our common stock does not develop or is not sustained, it may be difficult for you to sell your shares of common stock at an attractive price or at all. We cannot predict the prices at which our common stock will trade. It is possible that in one or more future periods our results of operations and progression of our product pipeline may not meet the expectations of public market analysts and investors, and, as a result of these and other factors, the price of our common stock may fall.

#### The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The initial public offering price for our common stock was determined through negotiations with the underwriters. This initial public offering price may differ from the market price of our common stock after the offering. As a result, you may not be able to sell your common stock at or above the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include:

- · the success of existing or new competitive products or technologies;
- · the timing and results of clinical trials for our current product candidates and any future product candidates that we may develop;
- · commencement or termination of collaborations for our product candidates;

- · failure or discontinuation of any of our product candidates;
- failure to develop our ABC Platform;
- results of preclinical studies, clinical trials or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors;
- · 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 personnel;
- the commencement of litigation;
- the level of expenses related to any of our research programs, product candidates that we may develop;
- · the results of our efforts to develop additional product candidates or products;
- · actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- · announcement or expectation of additional financing efforts;
- · sales of our common stock by us, our insiders, or other stockholders;
- · expiration of market standoff or lock-up agreements;
- · variations in our financial results or those of companies that are perceived to be similar to us;
- · changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- · 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 recent years, the stock market in general, and the market for pharmaceutical and biotechnology companies in particular, has experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

# If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock could decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.



# A significant portion of our total outstanding shares is restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, upon the expiration of the market standoff and lock-up agreements, the early release of these agreements or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. After this offering and after giving effect to the conversion of all outstanding shares of our redeemable convertible preferred stock, convertible notes (assuming conversion of \$12.5 million principal amount and accrued interest of our 2017 convertible notes as of June 30, 2018 at a conversion price of \$5.00 per share and the conversion of \$33.8 million principal amount and accrued interest of our 2018 convertible notes as of June 30, 2018 at a conversion price of \$8.00 per share) and warrants into an aggregate of 19,609,119 shares of our common stock, we will have 36,573,353 shares of common stock outstanding based on 7,964,234 shares of our common stock outstanding as of June 30, 2018. Of these shares, the 9,000,000 shares we are selling in this offering may be resold in the public market immediately. The remaining 27,573,353 shares, or 75.4% of our outstanding shares after this offering, are currently prohibited or otherwise restricted under securities laws, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions and excluding shares of restricted stock that will remain unvested, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. The representatives may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements at any time and for any reason. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act. See the section of this prospectus titled "Shares Eligible for Future Sale" for additional information.

Moreover, after this offering, holders of an aggregate of 19,609,119 shares of our common stock will have rights, subject to 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 plan 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 and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section of this prospectus titled "Underwriting." If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

### Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We will seek additional capital through one or a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. We, and indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future offerings. To the extent that we raise additional capital through the sale of equity securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term but limit our potential cash flow and revenue in the future. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us.

# Insiders will continue to have substantial influence over us after this offering, which could limit your ability to affect the outcome of key transactions, including a change of control.

After this offering, our directors, executive officers, holders of more than 5% of our outstanding common stock and their respective affiliates will beneficially own shares representing approximately 59.6% of our outstanding common stock, including the purchase of an aggregate of 3,500,000 shares of our common stock in the offering by investment entities affiliated with certain of our principal stockholders. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

# 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. For so long as we remain an emerging growth company, we are permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of SOX Section 404, 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 stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. In this prospectus, we 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 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. Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of Nasdaq, 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. We expect that we will need to hire additional accounting, finance, and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company, and our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements. These requirements will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that the rules and regulations applicable to us as a public company may make it more difficult and more expensive for us to obtain director and officer liability insurance, which could make it more difficult for us to attract and retain qualified members of our board of directors. We are currently 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.

Pursuant to SOX Section 404, we will be required to furnish a report by our management on our internal control over financial reporting beginning with our second filing of an Annual Report on Form 10-K with the SEC after we become a public company. 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 SOX 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, adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting 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 SOX Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

#### If we are unable to maintain effective internal controls, our business, financial position and results of operations could be adversely affected.

As a public company, we will be subject to reporting and other obligations under the Securities Exchange Act of 1934, as amended, or the Exchange Act, including the requirements of SOX Section 404, which require annual management assessments of the effectiveness of our internal control over financial reporting.

The rules governing the standards that must be met for management to determine that our internal control over financial reporting is effective are complex and require significant documentation, testing and possible remediation to meet the detailed standards under the rules. During the course of its testing, our management may identify material weaknesses or deficiencies which may not be remedied in time to meet the deadline imposed by the Sarbanes-Oxley Act of 2002. These reporting and other obligations place significant demands on our management and administrative and operational resources, including accounting resources.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States. Any failure to maintain effective internal controls could have an adverse effect on our business, financial position and results of operations.

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

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in the section of this prospectus titled "Use of Proceeds." Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Delaware law and provisions in our certificate of incorporation and bylaws that will become effective immediately prior to the closing of this offering might discourage, delay, or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions in our certificate of incorporation and bylaws that will become effective immediately prior to the closing of this offering may discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our charter documents will:

- · provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- · eliminate cumulative voting in the election of directors;
- authorize our board of directors to issue shares of preferred stock and determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval;
- provide our board of directors with the exclusive right to elect a director to fill a vacancy or newly created directorship;
- · permit stockholders to only take actions at a duly called annual or special meeting and not by written consent;
- prohibit stockholders from calling a special meeting of stockholders;
- require that stockholders give advance notice to nominate directors or submit proposals for consideration at stockholder meetings;
- authorize our board of directors, by a majority vote, to amend the bylaws; and
- require the affirmative vote of at least 66 2/3% or more of the outstanding shares of common stock to amend many of the provisions described above.

In addition, Section 203 of the General Corporation Law of the State of Delaware, or DGCL, prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

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

#### Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware will be the exclusive forum for:

- · any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of fiduciary duty;
- any action asserting a claim against us arising under the DGCL, our amended and restated certificate of incorporation, or our amended and restated bylaws; and

• any action asserting a claim against us that is governed by the internal-affairs doctrine.

Our amended and restated bylaws further provide that the U.S. federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive-forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on our management's beliefs and assumptions and on information currently available to our management. Some of the statements under "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" and elsewhere in this prospectus contain forward-looking statements. In some cases, you can identify forward- looking statements by the following words: "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "ongoing," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

These statements involve risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- · the success, cost and timing of our development activities, preclinical studies and clinical trials;
- the translation of our preclinical results and data and early clinical trial results into future clinical trials in humans;
- the number, size and design of clinical trials that regulatory authorities may require to obtain marketing approval, including whether our planned Phase 2 trial in wet AMD will be considered a pivotal trial by the FDA;
- · the timing or likelihood of regulatory filings and approvals;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations and/or warnings in the label of any approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to develop and commercialize our product candidates;
- · the rate and degree of market acceptance of our product candidates;
- · the success of competing products or platform technologies that are or may become available;
- our plans and ability to establish sales, marketing and distribution infrastructure to commercialize any product candidates for which we obtain approval;
- future agreements with third parties in connection with the commercialization of our product candidates;
- the size and growth potential of the markets for our product candidates, if approved for commercial use, and our ability to serve those markets;
- · existing regulations and regulatory developments in the United States and foreign countries;
- the expected potential benefits of strategic collaboration agreements and our ability to attract collaborators with development, regulatory and commercialization expertise;
- · the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- · potential claims relating to our intellectual property and third-party intellectual property;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- · the pricing and reimbursement of our product candidates, if approved;

- our ability to attract and retain key managerial, scientific and medical personnel;
- · the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- · our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- · our anticipated use of the proceeds from this offering.

You should refer to the "Risk Factors" section of this prospectus for a discussion of other important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This prospectus contains market data and industry forecasts that were obtained from industry publications. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We have not independently verified any third-party information. While we believe the market position, market opportunity and market size information included in this prospectus is generally reliable, such information is inherently imprecise.

This prospectus contains statistical data, estimates, and forecasts that are based on independent industry publications or reports or other publicly available information, as well as other information based on our internal sources. This information involves a number of assumptions and limitations, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed in the section of this prospectus titled "Risk Factors" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

### USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$80.1 million, or approximately \$92.7 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 currently expect to use the net proceeds from this offering together with our existing cash and cash equivalents as follows:

- approximately \$40 million to advance KSI-301 through completion of enrollment of the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with wet AMD as well as through completion of a Phase 1b clinical trial;
- approximately \$25 million to advance KSI-301 into Phase 2 clinical trials in China for wet AMD and DME/DR and through an administrative
  interim analysis in each of the studies (anticipated to occur when approximately 200 patients have completed approximately six months of
  treatment duration, per study);
- approximately \$15 million to advance KSI-301 into the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with DME/DR; and
- the remainder for research and development of our pipeline including KSI-501, to initiate additional clinical studies in ophthalmology and for working capital and other general corporate purposes.

Based on our current business plan, we believe that our existing cash, cash equivalents, and the anticipated net proceeds from this offering will provide sufficient funds to sustain our operations through at least the next 12 months. Our estimate as to how long we expect our existing cash, cash equivalents and the anticipated net proceeds from this offering to be available to fund our operations is based on assumptions that may prove inaccurate, and we could use our available capital resources sooner than we currently expect. We may elect to delay the initiation of the global Phase 2 clinical trial in the U.S., EU and rest of world in patients with DME/DR, as well as other development efforts, to enable sufficient funding for completion of the global Phase 2 clinical trial in the U.S., EU and rest of world in patients with off world in patients with wet AMD. If we continue our plan to complete each of the clinical trials of KSI-301 set forth above, then we will need to raise additional funds to complete the trials, including the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with wet AMD. We will also require additional funds to advance our pipeline research and development efforts, including the global Phase 2 clinical trial in the U.S., EU and rest of the amounts of which will depend on the ultimate clinical development paths we pursue. We may satisfy our future cash needs through public or private equity or debt financings, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements, or a combination of these approaches.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual expenditures and the extent of clinical development may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from preclinical studies or clinical studies we may commence in the future, as well as any collaborations that we may enter into with third parties, or any business development opportunities we may engage in for our programs and any unforeseen cash needs.

We may also use a portion of our net proceeds to acquire or invest in complementary products, technologies, or businesses; however, we currently have no agreements or commitments to complete any such transactions.

Since we expect to use the net proceeds from this offering for working capital and other general corporate purposes, our management will have broad discretion over the use of the net proceeds from this offering. As of the date of this prospectus, we intend to invest the net proceeds in short-term interest-bearing investment-grade securities, certificates of deposit or government securities.

### **DIVIDEND POLICY**

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our board of directors subject to applicable laws and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions and capital requirements. Our future ability to pay cash dividends on our capital stock is limited by the terms of our existing debt instruments and may be limited by any future debt instruments or preferred securities.

<sup>64</sup> 

### CAPITALIZATION

The following table summarizes our cash and cash equivalents and capitalization as of June 30, 2018:

- on an actual basis;
- on a pro forma basis to reflect (1) the automatic conversion of the redeemable convertible preferred stock into 12,385,154 shares of common stock, (2) the assumed conversion of the outstanding 2017 convertible notes into an aggregate of 2,497,722 shares of our common stock immediately prior to the closing of this offering (assuming conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share), (3) the automatic conversion of the outstanding 2018 convertible notes into an aggregate of 4,226,243 shares of our common stock immediately prior to the closing of this offering (assuming conversion of \$3.8 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$8.00 per share), (4) the resulting settlement of the derivative instrument upon the conversion of the 2018 convertible notes and the \$7.1 million impact to accumulated deficit as a result of the fair value adjustment to the derivative and loss on extinguishment of the 2018 convertible notes, (5) the automatic conversion of warrants to purchase 500,000 shares of our Series B redeemable convertible preferred stock as of June 30, 2018 into warrants to purchase an equivalent number of shares of our common stock and assuming the exercise of the common stock warrants immediately following the closing of this offering, and (6) the filing of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering; and
- on a pro forma as adjusted basis to reflect (1) the pro forma adjustments set forth above and (2) the sale and issuance by us of 9,000,000 shares of common stock in this offering at the initial public offering price of \$10.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the information in this table together with our consolidated financial statements and related notes, as well as the sections captioned "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," appearing elsewhere in this prospectus.

	As of June 30, 2018					
				Pro		ro Forma
		Actual (in thousan		Forma pt share and pe		s Adjusted
Cash and cash equivalents	\$	17,641	ius, exce \$	17,641	r snare C	98,600
*	φ	<i>,</i>	φ	17,041	φ	78,000
Convertible notes	\$	39,495	\$	_	\$	—
Redeemable convertible preferred stock warrant liability		4,005		_		
Derivative instrument		7,367		—		—
Redeemable convertible preferred stock, \$0.0001 par value per share; 18,753,595 shares authorized, 12,385,154 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted		50,017		_		_
Stockholders' (deficit) equity:		,				
Preferred stock, \$0.0001 par value per share; no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized and no shares issued and outstanding, pro forma and pro forma as adjusted		_		_		_
Common stock, \$0.0001 par value per share; 28,500,000 shares authorized, 7,964,234 shares issued and outstanding, actual; 490,000,000 shares authorized, 27,573,353 shares issued and outstanding, pro forma; 490,000,000 shares authorized, 36,573,353 shares issued and						
outstanding, pro forma as adjusted		1		3		4
Additional paid-in capital		1,424		109,404		189,503
Accumulated deficit		(85,652)		(92,750)		(92,750)
Total stockholders' (deficit) equity		(84,227)		16,657		96,757
Total capitalization	\$	16,657	\$	16,657	\$	96,757

The number of shares of our common stock outstanding immediately after this offering is based on 7,964,234 shares of common stock outstanding as of June 30, 2018, and excludes:

- 3,383,478 shares of common stock issuable upon the exercise of outstanding options as of June 30, 2018 with a weighted-average exercise price of \$3.82 per share;
- shares issuable upon conversion of accrued interest on our outstanding 2017 convertible notes and our outstanding 2018 convertible notes since June 30, 2018;
- 398,693 shares of common stock reserved for future issuance under our 2015 Share Incentive Plan as of June 30, 2018;
- 4,300,000 shares of common stock reserved for future issuance under our 2018 Equity Incentive Plan (including 1,278,954 shares subject to
  options granted as of the date of this prospectus, and 60,000 shares subject to restricted stock units which will become effective upon filing of
  our registration statement on Form S-8); and
- 460,000 shares of common stock reserved for future issuance under our 2018 Employee Stock Purchase Plan.

### DILUTION

If you invest in our common stock you will experience immediate and substantial dilution in the pro forma net tangible book value of your shares of common stock. Dilution in pro forma net tangible book value represents the difference between the 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.

Historical net tangible book value (deficit) represents our total tangible assets (total assets less deferred offering costs) less total liabilities and our redeemable convertible preferred stock. As of June 30, 2018, our historical net tangible book deficit was \$86.4 million and our historical net tangible book deficit per share was \$10.85. After giving effect to the automatic conversion of all outstanding shares of redeemable convertible preferred stock into 12,385,154 shares of common stock in connection with this offering, the assumed conversion of the outstanding 2017 convertible notes into an aggregate of 2,497,722 shares of our common stock immediately prior to the closing of this offering (assuming the conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share), the automatic conversion of the outstanding 2018 convertible notes into an aggregate of 4,226,243 shares of our common stock (assuming conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion stock (assuming conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion stock (assuming conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion of the fair value adjustment to the derivative and loss on extinguishment of the 2018 convertible notes, and the automatic conversion of warrants to purchase 500,000 shares of our Series B redeemable convertible preferred stock as of June 30, 2018 into warrants to purchase an equivalent number of shares of our common stock and assuming the exercise of the common stock warrants, immediately following the closing of this offering, our pro forma net tangible book value as of June 30, 2018 would have been \$14.5 million, or \$0.50 per share.

After giving effect to the sale and issuance of 9,000,000 shares of common stock in this offering at the initial public offering price of \$10.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2018 would have been \$96.8 million, or \$2.65 per share. This represents an immediate increase in pro forma net tangible book value of \$2.12 per share to existing stockholders and an immediate dilution of the pro forma net tangible book value of \$7.35 per share to new investors purchasing common stock in this offering.

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

Initial public offering price per share		\$10.00
Historical net tangible book value (deficit) per share as of June 30, 2018	\$(10.85)	
Changes to historical net tangible book deficit per share attributable to pro forma adjustments identified above	11.37	
Pro forma net tangible book value per share before this offering	0.53	
Increase in pro forma net tangible book value per share attributable to investors participating in the offering	2.12	
Pro forma as adjusted net tangible book value per share, as adjusted to give effect to this offering		2.65
Dilution in pro forma as adjusted net tangible book value per share to investors participating in this offering		\$ 7.35

If the underwriters exercise their option in full to purchase 1,350,000 additional shares of common stock in this offering, the pro forma as adjusted net tangible book value per share after the offering would be \$2.88 per share, the increase in the pro forma net tangible book value per share to existing stockholders would be \$2.35 per share, and the pro forma as adjusted dilution to new investors purchasing common stock in this offering would be \$7.12 per share.

The following table summarizes, on a pro forma basis as adjusted basis as described above as of June 30, 2018, the differences between the number of shares of common stock purchased from us, the total consideration and the weighted-average price per share paid by existing stockholders and by investors participating in this

offering at the initial public offering price of \$10.00 per share, before deducting underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Pure	Shares Purchased		Total Consideration		
	Number	Percent	Amount Percent		Per Share	
Existing stockholders before this offering	27,573,353	75.4%	\$ 96,755,749	51.8%	\$	3.51
Investors participating in this offering	9,000,000	24.6%	\$ 90,000,000	48.2%	\$	10.00
Total	36,573,353	100.0%	\$186,755,749	100.0%	\$	5.11

The number of shares of our common stock outstanding immediately after this offering is based on 7,964,234 shares of common stock outstanding as of June 30, 2018, and excludes:

- 3,383,478 shares of common stock issuable upon the exercise of outstanding options, as of June 30, 2018, with a weighted-average exercise price of \$3.82 per share;
- shares issuable upon conversion of accrued interest on our outstanding 2017 convertible notes and our outstanding 2018 convertible notes since June 30, 2018;
- 398,693 shares of common stock reserved for future issuance under our 2015 Share Incentive Plan as of June 30, 2018;
- 4,300,000 shares of common stock reserved for future issuance under our 2018 Equity Incentive Plan (including 1,278,954 shares subject to
  options granted as of the date of this prospectus, and 60,000 shares subject to restricted stock units which will become effective upon filing of
  our registration statement on Form S-8); and
- 460,000 shares of common stock reserved for future issuance under our 2018 Employee Stock Purchase Plan.

<sup>68</sup> 

### SELECTED CONSOLIDATED FINANCIAL DATA

The consolidated statement of operations data for the years ended December 31, 2016 and 2017 and the consolidated balance sheet data as of December 31, 2016 and 2017 are derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The consolidated statement of operations data for the six months ended June 30, 2017 and 2018 and the consolidated balance sheet data as of June 30, 2018 are derived from our unaudited consolidated financial statements and related notes included elsewhere in this prospectus. In the opinion of management, the unaudited data reflects all adjustments, consisting solely of normal recurring adjustments, necessary for the fair presentation of the financial information in those statements. You should read this data together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information in "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our historical results are not necessarily indicative of the results to be expected for any other period. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes included elsewhere in this prospectus.

	Year Ended	December 31,	Six Months Ended June 30,				
	2016	2017	2017	2018			
		(in thousands, except share and per share data)					
Consolidated Statement of Operations Data:							
Operating expenses:							
Research and development	\$ 14,053	\$ 22,022	\$ 10,098	\$ 7,233			
General and administrative	3,098	3,499	1,687	3,404			
Total operating expenses	17,151	25,521	11,785	10,637			
Loss from operations	(17,151)	(25,521)	(11,785)	(10,637)			
Interest expense	(6)	(1,185)	(12)	(3,347)			
Other income (expense), net	25	(1,230)	14	(2,345)			
Net loss and comprehensive loss	\$ (17,132)	\$ (27,936)	\$ (11,783)	\$ (16,329)			
Net loss per share attributable to common stockholders, basic and							
diluted	<u>\$ (2.38)</u>	<u>\$ (3.72)</u>	<u>\$ (1.58)</u>	<u>\$ (2.11)</u>			
Weighted-average shares outstanding used in computing net loss							
per share attributable to common stockholders, basic and diluted	7,211,360	7,515,336	7,444,612	7,720,967			
Pro forma net loss per share attributable to common stockholders,							
basic and diluted <sup><math>(1)</math></sup>		\$ (1.21)		\$ (0.40)			
Weighted-average shares outstanding used in computing pro forma							
net loss per share, basic and diluted <sup><math>(1)</math></sup>		21,074,940		26.556.248			

	As of December 31,				As of	
	2016		2017		Jun	e 30, 2018
			(in th	iousands)		
Consolidated Balance Sheet Data:						
Cash and cash equivalents	\$	9,622	\$	1,395	\$	17,641
Working capital <sup>(2)</sup>		7,682		(7,563)		13,617
Total assets		12,114		3,244		21,703
Convertible notes				9,921		39,495
Redeemable convertible preferred stock warrant liability				2,300		4,005
Derivative instrument						7,367
Total liabilities		3,180		21,965		55,913
Redeemable convertible preferred stock		50,017		50,017		50,017
Accumulated deficit		(41,387)		(69,323)		(85,652)
Total stockholders' deficit		(41,083)		(68,738)		(84,227)

(1) For the calculation of our pro forma net loss per share and pro forma weighted-average shares outstanding, see Note 14 to our consolidated financial statements included elsewhere in this prospectus.

(2) We define working capital as current assets less current liabilities. See our consolidated financial statements and related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

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

You should read the following discussion and analysis of our financial condition and results of operations together with the section of this prospectus titled "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risk, assumptions and uncertainties, such as statements of our plans, objectives, expectations, intentions, forecasts and projections. Our actual results and the timing of selected events could differ materially from those discussed in these forward-looking statements as a result of several factors, including those set forth under the section of this prospectus. You should carefully read the "Risk Factors" to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section of this prospectus titled "Special Note Regarding Forward-Looking Statements."

#### Overview

We are a clinical stage biopharmaceutical company specializing in novel therapeutics to treat chronic, high-prevalence retinal diseases. Our most advanced product candidate is KSI-301, a biologic therapy built with our antibody biopolymer conjugate platform, or ABC, platform, which is designed to maintain potent and effective drug levels in ocular tissues. We believe that KSI-301, if approved, has the potential to become an important anti-vascular endothelial growth factor, or anti-VEGF, therapy in wet age-related macular degeneration, or wet AMD, and diabetic retinopathy, or DR. KSI-301 and our ABC Platform were developed at Kodiak, and we own worldwide rights to those assets, including composition of matter patent protection with respect to KSI-301. We have applied our ABC Platform to develop additional product candidates beyond KSI-301, including KSI-501, our bispecific anti-IL-6/VEGF bioconjugate. We intend to progress these and other product candidates to address high-prevalence ophthalmic diseases.

We initiated our first-in-human, Phase 1 clinical study of KSI-301 in the United States in nine patients in July 2018. We have successfully dosed all patients at the pre-planned dose levels and reached the primary safety and tolerability endpoint of the study. Having successfully met the primary endpoint of safety and tolerability in the Phase 1 study, with the additional observations around bioactivity, we plan to further evaluate the highest dose tested of KSI-301, 5 mg, in a series of global studies in wet AMD and DR, including diabetic macular edema, or DME. We expect to be dosing patients in a global Phase 2 study of KSI-301 in the United States in early 2019, and clinical trial applications to ex-U.S. regulatory authorities for this study are in progress.

We plan to continue to use third-party contract research organizations, or CROs, to carry out our preclinical and clinical development. We rely on third-party contract manufacturing organizations, or CMOs, to manufacture and supply our preclinical and clinical materials to be used during the development of our product candidates. We currently do not need commercial manufacturing capacity.

We do not have any products approved for sale and have not generated any product revenue since inception. From inception through June 30, 2018, we funded our operations primarily with an aggregate of \$94.4 million in gross cash proceeds from the sale and issuance of redeemable convertible preferred stock, convertible notes and warrants to purchase Series B redeemable convertible preferred stock.

Since inception in June 2009, we have devoted substantially all of our resources to discovering and developing product candidates and manufacturing processes, building our ABC Platform and assembling our core capabilities in drug development for ophthalmic disease.

We have incurred significant operating losses to date and expect that our operating losses will increase significantly as we advance our product candidates, particularly KSI-301, through preclinical and clinical development, seek regulatory approval, and prepare for, and, if approved, proceed to commercialization; broaden and improve our platform; acquire, discover, validate and develop additional product candidates; obtain, maintain, protect and enforce our intellectual property portfolio; and hire additional personnel. In addition, upon the completion of this offering we expect to incur additional costs associated with operating as a public company.

Our net losses were \$17.1 million and \$27.9 million for the years ended December 31, 2016 and 2017 and \$11.8 million and \$16.3 million for the six months ended June 30, 2017 and 2018, respectively. As of June 30, 2018, we had an accumulated deficit of \$85.7 million.

Our ability to generate product revenue will depend on the successful development and eventual commercialization of one or more of our product candidates. Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions. Adequate funding may not be available to us on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of KSI-301 for wet AMD or DR or delay our efforts to advance and expand our product pipeline.

As of June 30, 2018, we had cash and cash equivalents of \$17.6 million. Without giving effect to the anticipated net proceeds from this offering, we do not believe that those cash and cash equivalents will be sufficient to enable us to fund our current operations for at least one year from the original issuance date of our consolidated financial statements for the period ended June 30, 2018. We believe that this raises substantial doubt about our ability to continue as a going concern. See Note 1 to our consolidated financial statements included elsewhere in this prospectus for additional information on our assessment. Similarly, the report of our independent registered public accounting firm on our consolidated financial statements as of and for the year ended December 31, 2017 includes an explanatory paragraph indicating that there is substantial doubt about our ability to continue as a going concern.

#### **Components of Operating Results**

#### **Operating Expenses**

#### Research and Development Expenses

Substantially all of our research and development expenses consist of expenses incurred in connection with the development of our ABC Platform and product candidates. These expenses include certain payroll and personnel expenses, including stock-based compensation, for our research and product development employees; laboratory supplies and facility costs; consulting costs; contract manufacturing and fees paid to CROs to conduct certain research and development activities on our behalf; and allocated overhead, including rent, equipment, depreciation and utilities. We expense both internal and external research and development expenses as they are incurred. Costs of certain activities, such as manufacturing and preclinical and clinical studies, are generally recognized based on an evaluation of the progress to completion of specific tasks. Nonrefundable payments made prior to the receipt of goods or services that will be used or rendered for future research and development activities are deferred and capitalized. The capitalized amounts are recognized as expense as the goods are delivered or the related services are performed.

We are focusing substantially all of our resources and development efforts on the development of our product candidates, in particular KSI-301. We expect our research and development expenses to increase substantially following this offering and during the next few years, as we seek to initiate our Phase 2 studies, complete our clinical program, pursue regulatory approval of our drug candidates and prepare for a possible commercial launch. Predicting the timing or the final cost to complete our clinical program or validation of our commercial manufacturing and supply processes is difficult and delays may occur because of many factors, including factors outside of our control. For example, if the FDA or other regulatory authorities were to require us to conduct clinical trials beyond those that we currently anticipate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development. Furthermore, we are unable to predict when or if our drug candidates will receive regulatory approval with any certainty.

## General and Administrative Expenses

General and administrative expenses consist principally of payroll and personnel expenses, including stock-based compensation, professional fees for legal, consulting, accounting and tax services, allocated overhead, including rent, equipment, depreciation and utilities, and other general operating expenses not otherwise classified as research and development expenses.

We anticipate that our general and administrative expenses will increase as a result of increased personnel costs, including stock-based compensation, expanded infrastructure and higher consulting, legal and accounting services associated with maintaining compliance with stock exchange listing and SEC requirements, investor relations costs and director and officer insurance premiums associated with being a public company.

## Interest Expense

Interest expense consists primarily of interest expense related to our convertible notes, including accretion of debt discount and debt issuance costs.

### Other Income (Expense), Net

Other income (expense), net primarily consists of changes in the fair value of warrants for Series B redeemable convertible preferred stock, changes in fair value of the derivative instruments and interest income.

## **Results of Operations**

## Comparison of the Six Months Ended June 30, 2017 and 2018

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

	Six Months Ended June 30,		Change	
	2017	2018	Dollar	Percent
		(in thous	ands)	
Operating expenses:				
Research and development	\$ 10,098	\$ 7,233	\$(2,865)	(28)%
General and administrative	1,687	3,404	1,717	102
Loss from operations	(11,785)	(10,637)	1,148	10
Interest expense (includes \$1,867 attributable to related parties for the six months ended June 30, 2018) Other income (expense), net (includes \$1,585 other expense attributable to related parties	(12)	(3,347)	(3,335)	NM*
for the six months ended June 30, 2018)	14	(2,345)	(2,359)	NM*
Net loss	\$(11,783)	\$(16,329)	\$(4,546)	(39)%

## \* NM-not meaningful

#### Research and Development Expenses

Research and development expenses decreased \$2.9 million, or 28%, from the six months ended June 30, 2017 to the six months ended June 30, 2018, as we incurred expenses relating to KSI-301 drug substance manufacturing runs for use in our Phase 1 and Phase 2 clinical trials primarily in fiscal 2017.

The following table summarizes our research and development expenses:

	Six Month	is Ended		
	June 30,			ige
	2017	2018	Dollar	Percent
		(in thou	isands)	
ABC Platform external expenses <sup>(1)</sup>	\$ 949	\$ 548	\$ (401)	(42)%
KSI-301 program external expenses <sup>(2)</sup>	5,427	3,488	(1,939)	(36)
Payroll and personnel expenses <sup>(3)</sup>	1,693	1,866	173	10
Other research and development expenses <sup>(4)</sup>	2,029	1,331	(698)	(34)
Total research and development expenses	\$10,098	\$7,233	<u>\$(2,865</u> )	(28)%

(1) ABC Platform external expenses primarily represent fees incurred for services of CMOs and CROs related to our ABC Platform.

(2) KSI-301 program external expenses primarily represent fees incurred for services of CMOs and CROs related to development of KSI-301.

(3) Payroll and personnel expenses include compensation of our personnel involved in research and development activities, including salaries, benefits and stock-based compensation. We do not allocate payroll and personnel expenses to specific programs, because these expenses relate to multiple programs and, as such, are separately classified.

(4) Other research and development expenses represent direct expenses related to research and development activities other than those listed above.

ABC Platform external expenses decreased by \$0.4 million, or 42%, from the six months ended June 30, 2017 to the six months ended June 30, 2018. The decrease was primarily due to increased focus on KSI-301.

KSI-301 program external expenses decreased by \$1.9 million, or 36%, from the six months ended June 30, 2017 to the six months ended June 30, 2018 due to completion of drug substance manufacturing runs for use in Phase 1 and Phase 2 clinical trials primarily in fiscal 2017.

Payroll and personnel expenses increased by \$0.2 million, or 10%, from the six months ended June 30, 2017 to the six months ended June 30, 2018. The increase was a result of increased headcount.

Other research and development expenses decreased by \$0.7 million, or 34%, from the six months ended June 30, 2017 to the six months ended June 30, 2018. The decrease was primarily due to increased focus on KSI-301. Our other research and development expenses may fluctuate in future periods as we elect to develop KSI-501 or other product candidates.

#### General and Administrative Expenses

General and administrative expenses increased \$1.7 million, or 102%, from the six months ended June 30, 2017 to the six months ended June 30, 2018. The increase in general and administrative expenses was primarily attributable to an increase of \$1.1 million in professional services related to accounting, audit and consulting services, an increase of \$0.3 million in stock-based compensation and an increase of \$0.3 million in additional allocated overhead expenses due to increased headcount.

#### Interest Expense

Interest expense for the six months ended June 30, 2018 was \$3.3 million which was mainly attributable to interest expense on convertible notes issued in August 2017 and February 2018, including accretion of discount and issuance costs.

#### Other Income (Expense), Net

Other income (expense), net was \$2.3 million for the six months ended June 30, 2018, which consisted of a \$1.7 million increase in fair value of the redeemable convertible preferred stock warrant liability and a \$0.8

million increase in fair value of the derivative instrument related to the convertible notes issued in February 2018, offset by interest income of \$0.1 million.

## Comparison of the Years Ended December 31, 2016 and 2017

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

Years Ended December 31,		Chan	ge
2016	2017	Dollar	Percent
	(in thous	ands)	
\$ 14,053	\$ 22,022	\$ 7,969	57%
3,098	3,499	401	13
(17,151)	(25,521)	(8,370)	49
(6)	(1,185)	(1,179)	NM*
25	(1,230)	(1,255)	NM*
\$(17,132)	\$(27,936)	\$(10,804)	63%
	Decem 2016 \$ 14,053 3,098 (17,151) (6) 25	$\begin{array}{c c} \hline \textbf{December 31,} \\ \hline \hline \hline 2016 & 2017 \\ \hline (in thous \\ \$ 14,053 & \$ 22,022 \\ \hline 3,098 & 3,499 \\ \hline (17,151) & (25,521) \\ \hline (6) & (1,185) \\ \hline 25 & (1,230) \end{array}$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

# \* NM-not meaningful

#### Research and Development Expenses

Research and development expenses increased \$8.0 million, or 57%, from the year ended December 31, 2016 to the year ended December 31, 2017.

The following table summarizes our research and development expenses:

		Years Ended		
		December 31, Char		
	2016	<u>2017</u> (in thou	Dollar usands)	Percent
ABC Platform external expenses <sup>(1)</sup>	\$ 7,582	\$ <u>9</u> 31	\$(6,651)	(88)%
KSI-301 program external expenses <sup>(2)</sup>	—	14,021	14,021	NM*
Payroll and personnel expenses <sup>(3)</sup>	3,375	3,288	(87)	(3)
Other research and development expenses <sup>(4)</sup>	3,096	3,782	686	22
Total research and development expenses	\$14,053	\$22,022	\$ 7,969	57%

\* NM-not meaningful

(1) ABC Platform external expenses primarily represent fees incurred for services of CMOs and CROs related to our ABC Platform.

(2) KSI-301 program external expenses primarily represent fees incurred for services of CMOs and CROs related to development of KSI-301.

(3) Payroll and personnel expenses include compensation of our personnel involved in research and development activities, including salaries, benefits and stock-based compensation. We do not allocate payroll and personnel expenses to specific programs, because these expenses relate to multiple programs and, as such, are separately classified.

(4) Other research and development expenses represent direct expenses related to research and development activities other than those listed above.

ABC Platform external expenses decreased by \$6.7 million, or 88%, from the year ended December 31, 2016 to the year ended December 31, 2017. The decrease was primarily attributable to the increased focus on the development of KSI-301 in the year ended December 31, 2017.

KSI-301 program external expenses were \$14.0 million in the year ended December 31, 2017.

Payroll and personnel expenses did not significantly change from the year ended December 31, 2016 to the year ended December 31, 2017.

Other research and development expenses increased by \$0.7 million, or 22%, from the year ended December 31, 2016 to the year ended December 31, 2017. The increase is attributable to the increase of \$0.7 million in CMO and external contractor expenses, increase of \$0.5 million in overhead and depreciation expenses, which was offset by a decrease in lab expenses of \$0.5 million.

#### General and Administrative Expenses

General and administrative expenses increased \$0.4 million, or 13%, from the year ended December 31, 2016 to the year ended December 31, 2017. The increase in general and administrative expenses was primarily attributable to an increase of \$0.3 million in professional services related to legal, accounting, consulting services and an increase of \$0.1 million in allocated overhead expenses.

#### Interest Expense

Interest expense for the year ended December 31, 2017 was \$1.2 million which was mainly attributable to interest expense on our convertible notes issued in August 2017, including accretion of discount and issuance costs.

#### Other Income (Expense), Net

Other income (expense), net was \$1.2 million for the year ended December 31, 2017, which was mainly attributable to the change in the fair value of the redeemable convertible preferred stock warrant liability.

#### Liquidity and Capital Resources; Plan of Operations

## Sources of Liquidity

From inception through June 30, 2018, we funded our operations primarily with an aggregate of \$94.4 million in gross cash proceeds from the sale and issuance of convertible preferred stock, convertible notes and warrants to purchase Series B redeemable convertible preferred stock. As of June 30, 2018, we had cash and cash equivalents of \$17.6 million.

## Future Funding Requirements

We have incurred net losses since our inception. For the years ended December 31, 2016 and 2017, we had net losses of \$17.1 million and \$27.9 million, respectively, and for the six months ended June 30, 2017 and 2018, we had net losses of \$11.8 million and \$16.3 million, respectively, and we expect to incur additional losses in future periods. As of June 30, 2018, we had an accumulated deficit of \$85.7 million. Based on our current business plan, we believe that our existing cash, cash investments, and proceeds from this offering will provide sufficient funds to sustain operations through at least the next 12 months.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will enable us (i) to advance KSI-301 through completion of enrollment of the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with wet AMD as well as through completion of a Phase 1b clinical trial; (ii) to advance KSI-301 into Phase 2 clinical trials in China for wet AMD and DME/DR and through an administrative interim analysis in each of the studies (anticipated to occur when approximately 200 patients have completed approximately six months of treatment duration, per study); (iii) to advance KSI-301 into the global Phase 2 clinical trial in the U.S., EU and rest of the world in patients with DME/DR; and (iv) the remainder for research and development of our pipeline including KSI-501, to initiate additional clinical studies in ophthalmology and for working capital and other general corporate purposes. We have based these estimates on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect. Because of the risks and uncertainties associated with research, development and commercialization of product candidates, we are unable to estimate the exact amount of our working capital requirements. Our future funding requirements will depend on and could increase significantly as a result of many factors, including those listed above.

Without giving effect to the anticipated net proceeds from this offering, we expect that our existing cash and cash equivalents will be insufficient to fund our operating expenses and clinical trial expenditure requirements through the next year. To finance our operations beyond that point, we would need to raise additional capital, which cannot be assured. We have concluded that these circumstances raise substantial doubt about our ability to continue as a going concern within one year after the original issuance date of our consolidated financial statements for the period ended June 30, 2018. See Note 1 to our consolidated financial statements included elsewhere in this prospectus for additional information on our assessment.

Similarly, in its report on our consolidated financial statements for the year ended December 31, 2017, our independent registered public accounting firm included an explanatory paragraph stating that our recurring losses from operations since inception and additional funding required to finance our operations raise substantial doubt about our ability to continue as a going concern.

To date, we have not generated any revenue. We do not expect to generate any meaningful revenue unless and until we obtain regulatory approval of and commercialize any of our product candidates or enter into collaborative agreements with third parties, and we do not know when, or if, either will occur. We expect to continue to incur significant losses for the foreseeable future, and we expect the losses to increase as we continue the development of, and seek regulatory approvals for, our product candidates, and begin to commercialize any approved products. We are subject to all of the risks typically related to the development of new product candidates, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. Moreover, following the completion of this offering, we expect to incur additional costs associated with operating as a public company.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. However, we have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. The timing and amount of our operating expenditures and capital requirements will depend on many factors, including:

- the scope, timing, rate of progress and costs of our drug discovery, preclinical development activities, laboratory testing and clinical trials for our product candidates;
- · the number and scope of clinical programs we decide to pursue;
- · the scope and costs of manufacturing development and commercial manufacturing activities;
- · the extent to which we acquire or in-license other product candidates and technologies;
- the cost, timing and outcome of regulatory review of our product candidates;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- our efforts to enhance operational systems and our ability to attract, hire and retain qualified personnel, including personnel to support the development of our product candidates;
- the costs associated with being a public company; and
- the cost and timing associated with commercializing our product candidates, if they receive marketing approval.

A change in the outcome of any of these or other variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. Furthermore, our operating plans may change in the future, and we will continue to require additional capital to meet operational needs and capital requirements associated with such operating plans. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make

certain investments and engage in certain merger, consolidation or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. If we are unable to raise additional funds when needed, we may be required to delay, reduce, or terminate some or all of our development programs and clinical trials. We may also be required to sell or license to others rights to our product candidates in certain territories or indications that we would prefer to develop and commercialize ourselves.

Adequate additional funding may not be available to us on acceptable terms or at all. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategies. See the section of this prospectus titled "Risk Factors" for additional risks associated with our substantial capital requirements.

#### 2017 Convertible Notes

In August 2017, we received \$10.0 million in gross proceeds from the issuance of convertible notes, or 2017 convertible notes, and warrants to purchase Series B redeemable convertible preferred stock. Interest on the unpaid principal balance of the 2017 convertible notes accrues and compounds monthly from October 1, 2017 at a contractual rate of 2.5% per month and is payable at maturity. Unless converted, the 2017 convertible notes mature on the earlier of (1) December 1, 2020 and (2) the date of the consummation of a change of control.

The 2017 convertible notes include embedded derivatives that are required to be bifurcated and accounted for separately as a single, compound derivative instrument. The estimated fair value of this derivative instrument was immaterial as of the issuance date and as of June 30, 2018, due to the probability of occurrence of the underlying events being remote. The 2017 convertible notes have an annual effective interest rate of 38.18%. Interest expense, including amortization of debt discount and issuance costs for the year ended December 31, 2017 and six months ended June 30, 2018 was \$1.1 million and \$1.7 million, respectively.

Our obligations with respect to the 2017 convertible notes are secured by all of our tangible and intangible assets. The 2017 convertible notes include covenants that restrict our ability to issue capital stock, repurchase or redeem capital stock, dispose of assets, incur debt, incur liens and make distributions to stockholders, including dividends. As of December 31, 2017 and June 30, 2018, we were in compliance with regards to all covenants with respect to the 2017 convertible notes. The 2017 convertible notes have customary events of default.

After January 31, 2018, each holder of 2017 convertible notes may at any time, at its option, elect to convert the principal amount and accrued interest of such convertible notes into shares of Series B redeemable convertible preferred stock at a price of \$5.00 per share. Upon the consummation of an IPO, the 2017 convertible notes' outstanding principal balance and accrued but unpaid interest will be repaid, unless the holder elects, at its option, to convert into shares of common stock issued in such IPO at the conversion price equal to the issuance price of common stock issued in such IPO.

As additional consideration for the notes, we issued warrants to purchase an aggregate of 500,000 shares of Series B redeemable convertible preferred stock at the exercise price of \$0.01, as adjusted for any stock splits, stock dividends, recapitalizations, reclassifications, combinations or similar transactions. Upon the consummation of this offering, those warrants will be converted into warrants to purchase shares of our common stock, and we expect a portion of those warrants to be exercised immediately following the closing of this offering.

#### 2018 Convertible Notes

In February 2018, we received \$33.0 million in gross proceeds from the issuance of convertible notes, or the 2018 convertible notes, of which we issued \$31.2 million and \$1.8 million aggregate principal amounts on February 2, 2018 and February 23, 2018, respectively. Interest on the unpaid principal balance of the notes accrues from the date of issuance, and compounds monthly from February 28, 2018 at a rate of 6.0% per year and is payable at maturity. Unless converted, the 2018 convertible notes mature on the earlier of (1) December 1, 2020 and (2) the date of the consummation of a change of control.

The 2018 convertible notes include embedded derivatives that are required to be bifurcated and accounted for separately as a single, compound derivative instrument. The estimated fair value of this derivative instrument was \$6.6 million as of the issuance date and \$7.4 million as of June 30, 2018. The 2018 convertible notes have an annual effective interest rate of 15.10% for the principal amount issued on February 2, 2018 and 15.45% for the principal amount issued on February 23, 2018. Interest expense, including amortization of debt discount and issuance costs for the six months ended June 30, 2018 was \$1.5 million.

Our obligations with respect to the 2018 convertible notes are unsecured and subordinated to our obligations with respect to the 2017 convertible notes. The 2018 convertible notes include covenants that restrict our ability to issue capital stock, repurchase or redeem capital stock, dispose of assets, incur debt, incur liens and make distributions to stockholders, including dividends. As of June 30, 2018, we were in compliance with regards to all covenants with respect to the 2018 convertible notes. The 2018 convertible notes have customary events of default.

The 2018 convertible notes will automatically convert into shares of our common stock at a price equal to (1) 80% of the initial price to public in a qualified initial public offering if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public in a qualified initial public offering if such offering is completed on or after February 2, 2019. A qualified initial public offering is one in which we receive aggregate gross proceeds of at least \$75.0 million or all of the 2017 convertible notes convert into shares of our common stock. In connection with an offering that does not constitute a qualified initial public offering, each holder of 2018 convertible notes may, at its option, elect to convert the principal amount and accrued interest of the 2018 convertible notes of common stock at a price equal to (1) 80% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed on or after February 2, 2019 and (2) 75% of the initial price to public if such offering is completed on or after February 2, 2019 and (2) 75% of the initial price to public if such offering is completed on or after February 2, 2019 and (2) 75% of the initial price to public if such offering is completed on or after February 2, 2019.

#### Summary Statement of Cash Flows

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

		Years Ended December 31,		ths Ended e 30,
	2016	2017	2017	2018
	(in thou	isands)		
Net cash (used in) provided by:				
Operating activities	\$(16,047)	\$(17,655)	\$(7,762)	\$(15,707)
Investing activities	(771)	(209)	(42)	(38)
Financing activities	(120)	9,637	(87)	31,991
Net increase (decrease) in cash, cash equivalents and restricted cash	\$(16,938)	\$ (8,227)	\$(7,891)	\$ 16,246

#### **Cash Flows from Operating Activities**

Net cash used in operating activities was \$15.7 million for the six months ended June 30, 2018. Cash used in operating activities was primarily due to the use of funds in our operations to develop KSI-301, resulting in a net loss of \$16.3 million, adjusted by non-cash charges of \$6.8 million offset by a change in operating assets and liabilities of \$6.2 million. The non-cash charges primarily consisted of \$1.7 million in loss due to change in fair value of redeemable convertible preferred stock warrant liability, \$0.8 million in loss due to change in fair value of derivative instrument related to the convertible notes issued in February 2018, \$3.3 million in non-cash interest expense and amortization of debt discount and issuance costs, \$0.2 million of stock-based compensation. The change in net operating assets and liabilities was primarily due to a decrease in accrued liabilities of \$4.1 million mainly related to a decrease in accrued research and development and accrued compenses, a decrease in accounts payable of \$1.8 million due to the timing of vendor payments and an increase in prepaid and other assets of \$0.3 million mainly due to an increase in advance payments.

Net cash used in operating activities was \$7.8 million for the six months ended June 30, 2017. Cash used in operating activities was primarily due to the use of funds in our operations to develop KSI-301, resulting in a net loss of \$11.8 million, adjusted by non-cash charges of \$0.4 million and change in operating assets and liabilities of \$3.6 million. The non-cash charges primarily consisted of \$0.2 million of depreciation expense and \$0.1 million of stock-based compensation. The change in net operating assets and liabilities was primarily due to an increase in accrued liabilities of \$1.8 million mainly related to an increase in accrued research and development and accrued compensation expenses, an increase in accounts payable of \$1.4 million due to the timing of vendor payments and a decrease in prepaid and other assets of \$0.4 million mainly due to amortization of prepaid expenses.

Net cash used in operating activities was \$17.7 million for the year ended December 31, 2017. Cash used in operating activities was primarily due to the use of funds in our operations to develop KSI-301, resulting in a net loss of \$27.9 million, adjusted by non-cash charges of \$3.2 million offset by a change in operating assets and liabilities of \$7.0 million. The non-cash charges primarily consisted of \$1.3 million in expense due to change in fair value of redeemable convertible preferred stock warrant liability, \$1.2 million in non-cash interest expense and amortization of debt discount and issuance costs, \$0.5 million of depreciation and amortization, and \$0.3 million of stock-based compensation. The change in net operating assets and liabilities was primarily due to an increase in accrued liabilities of \$4.3 million mainly related to an increase in accrued research and development and accrued compensation expenses, an increase in accounts payable of \$2.2 million due to the timing of vendor payments and a decrease in prepaid and other assets of \$0.4 million mainly due to amortization of prepaid expenses.

Net cash used in operating activities was \$16.0 million for the year ended December 31, 2016. Cash used in operating activities was due to the use of funds in our operations to develop our ABC Platform, resulting in a net loss of \$17.1 million, offset by non-cash charges of \$0.3 million of depreciation expense and \$0.3 million of stock-based compensation expense, a decrease in prepaid expense and other current assets of \$0.3 million, and an increase in accrued liabilities and other current assets of \$0.2 million.

#### **Cash Flows from Investing Activities**

Net cash used in investing activities was less than \$0.1 million for the six months ended June 30, 2018 and primarily related to the purchase of property and equipment.

Net cash used in investing activities was less than \$0.1 million for the six months ended June 30, 2017 and primarily related to the purchase of property and equipment.

Net cash used in investing activities was \$0.2 million for the year ended December 31, 2017 and primarily related to purchase of property and equipment.

Net cash used in investing activities was \$0.8 million for the year ended December 31, 2016, which was related to \$0.8 million used in the purchase of property and equipment.

#### **Cash Flows from Financing Activities**

Net cash provided by financing activities was \$32.0 million for the six months ended June 30, 2018, which consisted primarily of \$33.0 million of gross proceeds from issuance of convertible notes, offset by \$0.8 million of deferred offering costs, \$0.1 million of debt issuance costs, \$0.1 million of principal payments under a capital lease agreement and less than \$0.1 million payments related to tenant improvement allowance payable.

Net cash used in financing activities was \$0.1 million for the six months ended June 30, 2017, which consisted primarily of principal payments under a capital lease agreement and payments related to tenant improvement allowance payable.

Net cash provided by financing activities was \$9.6 million for the year ended December 31, 2017, which consisted primarily of \$10.0 million of gross proceeds from issuance of convertible notes, offset by \$0.2 million of debt issuance costs, \$0.1 million of principal payments under a capital lease agreement and \$0.1 million payments related to tenant improvement allowance payable.

Net cash used in financing activities was \$0.1 million for the year ended December 31, 2016, which consisted primarily of principal payments under a capital lease agreement and payments related to tenant improvement allowance payable.

#### **Contractual Obligations and Commitments**

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

	Payments Due by Period				
	Less than	1 to 3	3 to 5	More than	
	1 year	years	years	5 years	Total
			(in thousands)		
Capital lease obligations <sup>(1)</sup>	\$ 135	\$ 61	\$ —	\$	\$ 196
Operating lease obligations <sup>(2)</sup>	514	1,145	1,214	526	3,399
Manufacturing agreements <sup>(3)</sup>	7,429	3,432	_	_	10,861
Tenant improvement obligations <sup>(4)</sup>	118	191	191	117	617
2017 convertible notes, including interest <sup>(5)</sup>	—	25,578	_	_	25,578
Total	\$ 8,196	\$30,407	\$1,405	\$ 643	\$40,651

We lease certain laboratory equipment under non-cancelable lease agreements, which are required to be paid over the contractually agreed period.
 We lease our facility under a non-cancelable operating lease. In January 2013, we entered into a lease for our current laboratory and office space that commenced in October 2013 and expires in October 2018. In March 2016, we entered into a lease amendment that extended the lease term to October 31, 2023. The minimum lease payments above do not include any related common area maintenance charges or real estate taxes.

(3) We have entered into service agreements with a third-party CMO, pursuant to which the CMO agreed to perform activities in connection with the manufacturing process of certain compounds. Such agreements state that planned activities that are included in some signed work orders are binding and, therefore, obligate us to pay the full price of the work order upon satisfactory delivery of products and services. Per the terms of the agreements, we have the option to cancel signed orders at any time upon written notice, which may or may not be subject to payment of a cancellation fee depending on the timing of the written notice in relation to the commencement date of the work, with the maximum cancellation fee equal to the full price of the work order. Although the payment of the cancellation fee will generally be due at the scheduled commencement date, we may record the manufacturing expense and related obligation as an accrued liability at the time of cancellation.

(4) We have tenant improvement obligations under our facilities lease agreements, which are required to be paid over the contractually agreed period.
(5) We received \$10.0 million in gross proceeds from the issuance of 2017 convertible notes and warrants to purchase Series B redeemable convertible preferred stock in August 2017. Interest on the unpaid principal balance of the 2017 convertible notes accrues from October 1, 2017 and compounds monthly from October 31, 2017 at a rate of 2.5% per month and is payable at maturity. Unless converted, the 2017 convertible notes mature on the earlier of (1) December 1, 2020 or (2) the date of the consummation of a change of control. If not converted or matured before December 1, 2020 we will repay \$10.0 million principal and \$15.6 million accrued interest.

We received \$33.0 million in gross proceeds from the issuance of 2018 convertible notes in February 2018, which is not included in the above table. Interest on the unpaid principal balance of the 2018 convertible notes accrues from the date of issuance, and compounds monthly from February 28, 2018 at a rate of 6.0% per year and is payable at maturity. Unless converted, the 2018 convertible notes mature on the earlier of (1) December 1, 2020 and (2) the date of the consummation of a change of control. If not converted or matured before December 1, 2020, we will repay \$33.0 million principal and \$6.1 million accrued interest.

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

We are also party to a cancellable assignment and license agreement that would require us to make milestone payments of up to \$33.2 million and royalty payments on net sales of products utilizing KSI-201 and related technology. Such milestones and royalties are dependent on future activity or product sales and are not provided for in the table above as the timing and amounts, respectively, are not estimable.

#### Critical Accounting Policies, Significant Judgments and Use of Estimates

Our financial statements have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

While our significant accounting policies are described in the notes to our consolidated financial statements, we believe that the following critical accounting policies are most important to understanding and evaluating our reported financial results.

### **Redeemable Convertible Preferred Stock**

We record all shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. In the event of the voluntary or involuntary liquidation, dissolution or winding up of the Company, or a liquidation event such as a merger, acquisition and sale of all or substantially all of our assets, each of which we refer to as a deemed liquidation event, proceeds will be distributed in accordance with the liquidation preferences set forth in the amended and restated certificate of incorporation unless the holders of redeemable convertible preferred stock have converted their redeemable convertible preferred shares into common stock. Therefore, the redeemable convertible preferred stock is recorded in mezzanine equity on the consolidated balance sheet as events triggering the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate us to pay the liquidation preferences to holders of redeemable convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur.

#### **Redeemable Convertible Preferred Stock Warrants**

We account for warrants to purchase shares of our redeemable convertible preferred stock as liabilities at their estimated fair value because these warrants may obligate us to transfer assets to the holders at a future date under certain circumstances, such as a merger, acquisition, reorganization, sale of all or substantially all of our assets, each a change of control event. The warrants are recorded at fair value upon issuance and are subject to remeasurement to fair value at each period end, with any fair value adjustments recognized in the consolidated statements of operations and comprehensive loss. We will continue to adjust the warrant liability for changes in fair value until the earlier of the exercise or expiration of the redeemable convertible preferred stock warrants, occurrence of a deemed liquidation event or conversion of redeemable convertible preferred stock into common stock.

If all outstanding shares of the series of redeemable convertible preferred stock for which the redeemable convertible preferred stock warrants are exercisable for are converted to shares of common stock or any other security in connection with a qualified IPO or otherwise, then after such conversion (1) the redeemable convertible preferred stock warrants shall become exercisable for such number of shares of common stock or such other security that each share of redeemable convertible preferred stock was converted into, multiplied by the number of shares subject to the redeemable convertible preferred stock warrants immediately prior to such conversion, and (2) the exercise price of the redeemable convertible preferred stock warrants shall automatically be adjusted to equal to the number obtained by dividing (a) the aggregate exercise price for which the redeemable convertible preferred stock warrants were exercisable immediately prior to such conversion by (b) the number of shares of common stock or such other security for which the redeemable convertible preferred stock warrants are exercisable immediately after such conversion. A Qualified IPO is our first sale of common stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended, at a per share public offering price (prior to underwriter commissions and expenses) of at least \$10.00 (as adjusted for stock splits, combinations, dividends and the like) and that results in aggregate gross cash proceeds to us of an amount equal to or greater than \$75.0 million (before deduction of underwriting discounts, commissions and expenses).

#### **Derivative Instrument**

The 2017 and 2018 convertible notes contain embedded features that provide the lenders with multiple settlement alternatives. Certain of these settlement features provide the lenders a right to a fixed number of our shares upon conversion of the notes, or the conversion option. Other settlement features provide the lenders the right or the obligation to receive cash or a variable number of our shares upon the completion of a capital raising transaction, change of control or our default, or the redemption features.

The 2017 convertible notes conversion option does not meet the requirements for separate accounting as an embedded derivative. However, the redemption features do meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument. The derivative instrument is recorded at fair value at inception and is subject to remeasurement to fair value at each balance sheet date, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss. The estimated fair value of the derivative instrument was immaterial as of the issuance date and as of June 30, 2018, due to the probability of occurrence of the underlying events being remote. We will continue to adjust the derivative instrument for changes in fair value until the earlier of the conversion or redemption of the 2017 convertible notes.

The 2018 convertible notes conversion option does not meet the requirements for separate accounting as an embedded derivative. However, the redemption features do meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument. The derivative instrument is recorded at fair value at inception and is subject to remeasurement to fair value at each balance sheet date, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss. The estimated fair value of the derivative instrument was \$6.6 million as of the issuance date and \$7.4 million as of June 30, 2018. We will continue to adjust the derivative instrument for changes in fair value until the earlier of the conversion or redemption of the 2018 convertible notes. We expect to record a non-cash charge in the third quarter of 2018 as a result of the final mark-to-market adjustment of the derivative instrument to fair value upon the completion of this offering.

#### Accrued Research and Development

Our preclinical study and clinical trial accruals are a component of research and development expenses and are based on patient enrollment and related costs at clinical investigator sites as well as estimates for the services received and efforts expended pursuant to contracts with multiple research institutions and CROs. We estimate preclinical study and clinical trial expenses based on level of services performed, progress of the studies, including the phase or completion of events, and contracted costs. The estimated costs of research and development provided, but not yet invoiced, are included in accrued liabilities and other current liabilities on the

balance sheet. If the actual timing of the performance of services or the level of effort varies from the original estimates, we will adjust the accrual accordingly. Payments made to CROs or CMOs under these arrangements in advance of the performance of the related services are recorded as prepaid expenses and other current assets until the services are rendered.

#### Stock-Based Compensation Expense

We use a fair value-based method to account for all stock-based compensation arrangements with employees including stock options and stock awards. Our determination of the fair value of stock options on the date of grant utilizes the Black-Scholes option-pricing model.

The fair value of the option granted is recognized on a straight-line basis over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period, which usually is the vesting period. Prior to January 1, 2017, stock-based compensation expense recognized at fair value included the impact of estimated forfeitures. Upon the adoption of ASU 2016-09 for periods after January 1, 2017, we no longer record estimated forfeitures on share-based awards and, instead, have elected to record forfeitures as they occur.

Equity instruments issued to non-employees are recorded at their fair value using the Black-Scholes valuation model on the measurement date and are subject to periodic adjustments as the underlying equity instruments vest. The non-employee stock-based compensation expense was not material for all periods presented.

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

- *Expected Term*—The expected term is calculated using the simplified method, which is available where there is insufficient historical data about exercise patterns and post-vesting employment termination behavior. The simplified method is based on the vesting period and the contractual term for each grant, or for each vesting-tranche for awards with graded vesting. The mid-point between the vesting date and the maximum contractual expiration date is used as the expected term under this method. For awards with multiple vesting-tranches, the times from grant until the mid-points for each of the tranches may be averaged to provide an overall expected term.
- Expected Volatility—For all stock options granted to date, the volatility data was estimated based on a study of publicly traded industry peer
  companies as we did not have any trading history for our common stock. For purposes of identifying these peer companies, we considered the
  industry, stage of development, size and financial leverage of potential comparable companies. For each grant, we measured historical
  volatility over a period equivalent to the expected term.
- Expected Dividend—The Black-Scholes valuation model valuation model calls for a single expected dividend yield as an input. We currently
  have no history or expectation of paying cash dividends on our common stock. Accordingly, we have estimated the dividend yield to be zero.
- *Risk-Free Interest Rate*—The risk-free interest rate is based on the yield available on U.S. Treasury zero-coupon issues similar in duration to the expected term of the equity-settled award.

#### Common Stock Valuations

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

In the absence of a public trading market for our common stock, on each grant date, we develop an estimate of the fair value of our common stock based on the information known to us on the date of grant, upon a review of any recent events and their potential impact on the estimated fair value per share of the common stock, and in part on input from an independent third-party valuation firm. As is provided for in Section 409A of the U.S. Internal Revenue Code, or the Code, we generally rely on our valuations for up to twelve months unless we have experienced a material event that would have affected the estimated fair value per common share.

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

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

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

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

- Option Pricing Method. Under the option pricing method, or OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.
- Probability-Weighted Expected Return Method. The probability-weighted expected return method, or PWERM, is a scenario-based analysis
  that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the
  possible outcomes available to us, as well as the economic and control rights of each share class.

Based on our early stage of development and other relevant factors, we determined that a hybrid approach of the OPM and the PWERM methods was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock for valuations performed as of December 31, 2016, December 31, 2017, and March 16, 2018. In determining the estimated fair value of our common stock, our board of directors also considered the fact that our stockholders could not freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock based on the weighted-average expected time to liquidity. The estimated fair value of our common stock at each grant date reflected a non-marketability discount partially based on the anticipated likelihood and timing of a future liquidity event.

Following the completion of this offering, our board of directors intends to determine the fair value of our common stock based on the closing quoted market price of our common stock on the date of grant.

## Income Taxes

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

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement.

As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (1) the factors underlying the sustainability assertion have changed and (2) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available. Our policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit. To date, there have been no interest or penalties charged in relation to the unrecognized tax benefits.

Net operating loss carryforwards, or NOLs, and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service, or IRS, and may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant shareholders over a three-year period in excess of 50% as defined under Sections 382 and 383 in the Internal Revenue Code, which could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on our value immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. We have not determined whether there has been any cumulative ownership changes or the impact on the utilization of the loss carryforwards if such changes have occurred.

As of December 31, 2017, we had unrecognized tax benefits, all of which would affect income tax expense if recognized, before consideration of our valuation allowance. We do not expect that our uncertain tax positions will materially change in the next twelve months.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation through the Tax Act. The Tax Act significantly revises the future ongoing U.S. corporate income tax by, among other things, lowering the U.S. corporate income tax rates and implementing a territorial tax system. The corporate tax rate will be reduced from 35% to 21% for tax years beginning after December 31, 2017. This rate change resulted in a \$2.5 million reduction in our deferred tax assets from the prior year with a corresponding offset to valuation allowance. Under the Tax Act, net operating losses arising after December 31, 2017 do not expire and cannot be carried back. However, the Tax Act limits the amount of net operating losses that can be used annually to 80% of taxable income for periods beginning after December 31, 2017. Existing net operating losses arising in years ending on or before December 31, 2017 are not affected by these provisions.

The SEC released SAB 118 on December 22, 2017 to provide guidance in the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the tax reform. The ultimate impact of tax reform may differ from our accounting for the relevant matters of the Tax Act, due to changes in clarification and interpretive guidance that may be issued by the IRS and actions we may take in response to the Tax Act. Tax reform is highly complex and we will continue to assess the impact that various provisions will have on our business. Any subsequent adjustment to these amounts will be recorded to current tax expense when the analysis is complete. Accordingly, we recorded a provisional charge for the

remeasurement of deferred taxes at 21% as of December 31, 2017, with a corresponding offset to our valuation allowance. We consider the accounting of the deferred tax re-measurements to be complete. However, ongoing guidance and accounting interpretation are expected in the near term and we expect to complete our analysis within the measurement period in accordance with SAB 118.

#### **Off-Balance Sheet Arrangements**

Since our inception, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the Securities and Exchange Commission, or SEC.

## **JOBS Act Accounting Election**

The Jumpstart Our Business Startups Act of 2012, or JOBS Act, permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until such pronouncements are made applicable to private companies, unless we otherwise irrevocably elect not to avail ourselves of this exemption. However, we have chosen to irrevocably "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to not take advantage of the extended transition period for complying with new or revised accounting standards is irrevocable.

#### **Recent Accounting Pronouncements**

See the sections titled "Summary of Significant Accounting Policies—Recent Accounting Pronouncements" in Note 2 to our consolidated financial statements included elsewhere in this prospectus for additional information.

#### Quantitative and Qualitative Disclosures about Market Risk

#### Interest Rate Sensitivity

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates or exchange rates. As of June 30, 2018, we had cash and cash equivalents of \$17.6 million, consisting of cash held in bank accounts and money market funds denominated in U.S. dollars. Due to the nature of our cash equivalents, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our cash and cash equivalents.

We do not believe that inflation, interest rate changes or exchange rate fluctuations had a significant impact on our results of operations for any periods presented herein.



## BUSINESS

## Overview

We are a clinical stage biopharmaceutical company specializing in novel therapeutics to treat chronic, high-prevalence retinal diseases. Our most advanced product candidate is KSI-301, a biologic therapy built with our antibody biopolymer conjugate platform, or ABC Platform, which is designed to maintain potent and effective drug levels in ocular tissues. We believe that KSI-301, if approved, has the potential to become an important anti-VEGF therapy in wet age-related macular degeneration, or wet AMD, and diabetic retinopathy, or DR. KSI-301 and our ABC Platform were developed at Kodiak, and we own worldwide rights to those assets, including composition of matter patent protection for KSI-301. We have applied our ABC Platform to develop additional product candidates beyond KSI-301, including KSI-501, our bispecific anti-IL-6/VEGF bioconjugate. We intend to progress these and other product candidates to address high-prevalence ophthalmic diseases.

We initiated our first-in-human, Phase 1 clinical study of KSI-301 in the United States in nine patients in July 2018. We have successfully dosed all patients at the pre-planned dose levels and reached the primary safety and tolerability endpoint of the study. To date, no patients in the Phase 1 study have experienced any serious adverse events. To date, there have been no drug-related adverse events, no dose limiting toxicities and, notably, no intraocular inflammation observed at any dose. The patients are continuing to be followed through a 12-week safety follow-up period. Improvements in best corrected visual acuity, or BCVA, and reductions in macular thickness on optical coherence tomography imaging, or OCT, have been observed at all dose levels. Over the four-week follow up period after the single dose, six of nine subjects had achieved a 10 or more letter improvement in BCVA from baseline (defined as average of screening and day one visits). In the high dose cohort of three patients (patients 7, 8, and 9) at the four-week visit, the BCVA improvements from baseline were 13, 10.5, and 29.5 letters, respectively, with associated improvements on macular thickness evidenced on OCT. This suggests that KSI-301, a large antibody biopolymer conjugate, is biologically active at all dose levels tested in patients based on pharmacodynamic measures (OCT imaging of retinal thickness) and efficacy measures (vision improvement). Having successfully met the primary endpoint of safety and tolerability in the Phase 1 study, with the additional observations around bioactivity, we plan to further evaluate the highest dose tested of KSI-301, 5 mg, in a series of global studies in wet AMD and DR, including diabetic macular edema, or DME.

We expect to be dosing patients in a global Phase 2 study of KSI-301 in the United States in early 2019, and clinical trial applications to ex-U.S. regulatory authorities for this study are in progress. This randomized, controlled study in approximately 400 treatment naïve wet AMD patients will evaluate the non-inferiority of intravitreal KSI-301 administered as infrequently as every 16 weeks versus EYLEA (aflibercept) administered on its every 8-week labeled regimen. FDA has indicated that this Phase 2 study, if successful, can be supportive of a marketing application for KSI-301 as one of two pivotal studies in wet AMD required for approval in the United States. We also plan to initiate a Phase 2 clinical trial of KSI-301 in the U.S. and EU in DR patients. We additionally plan to initiate two Phase 2 studies in China, one in wet AMD and one in DR, and we are planning for these studies to have the same clinical design frameworks as our U.S. and EU studies. In parallel to initiating our Phase 2 studies, we intend to expand the scope of our Phase 1 study into a Phase 1b open label study to evaluate the treatment effect and safety of sequential doses of KSI-301 with more intensive ophthalmic imaging and ocular pharmacokinetic assessments. Our IND for KSI-301 covers retinal vascular diseases and, in the future, we may also pursue other target indications for KSI-301, such as macular edema due to retinal vein occlusion, choroidal neovascularization due to pathologic myopia, or other diseases for which existing anti-VEGF therapies have been approved.

#### Target Indications

Our initial target indications for KSI-301 are wet AMD and DR. Wet AMD is a chronic and progressive disease of the central portion of the retina, known as the macula, which is responsible for sharp central vision and color perception. It is caused by abnormal blood vessels that grow underneath the retina and leak blood and fluid into the macula, causing visual distortion and acute vision loss, which can be permanent. Wet AMD is the leading cause of severe vision loss in adults over the age of 50 in the United States and the EU. We estimate the

combined prevalence of wet AMD in the United States and the EU to be approximately 2.9 million people. DR is a disease resulting from diabetes, in which chronically elevated blood sugar levels cause progressive damage to blood vessels in the retina. DR is the leading cause of blindness in working age adults in the United States and the EU. We estimate that the number of people in the United States and the EU with DR in 2015 was approximately 28.5 million.

## **Ongoing and Planned Clinical Development**

The following chart summarizes our clinical development plan for our lead product candidate, KSI-301:

Focus		2019	2020 2021	Expected Data Readout	Objectives	
DR/DME	Phase 1			Primary Endpoint September 2018	Primary safety & tolerability endpoint achieved Phase 2 dose selected Bioactivity signals observed	Long-term follow- (12 weeks)
Wet AMD, DR/DME, RVO		★ Phase 1b - U.S.		2019	Commencing 4Q2018 • Open label, multiple dose study to explore KSI-301 differentiation • Latest-generation imaging (OCT Angio) to study "on mechanism" durability • Spectrum of retenal vascular diseases with 36-week treatment duration	Study start-up
(Global) Wet AMD		Phase	2 - U.S./EU/ROW		Commencing early 2019 • Treatment naive wet AMD patients • Every 16 - overy 12- week dosing with KSI-301 (100% every 12-week or botter) • Non-inferiority vs Eylea every 8-week regimen with 48-week treatment duration • Designed as a pixetal study with an option for administrative interim analysis	activities ongoing
(China) Wet AMD, DR/DME			a Phase 2 - Wet AMD a Phase 2 - DR/DME	Interim 2020 Final 2021	China IND submission 1H 2019, studies expected to commence 2H2019 • Expect same design framework as global Ph2's [Q16W/Q12W dozing vs Episch • Expect administrative interim analysis 2H2020 to inform global planning activities	
(Global) DR/DME			Phase 2 - U.S./EU/ROW		Expected to commence 2H 2019 • Expect similar design as global Phase 2 in wAMD (QLOW/QL2W dowing vs Srijea) • Designed as a pivotal study with an option for administrative interim analysis	Study in planning

For approval in the U.S. and the EU, we anticipate that one additional confirmatory study would be required for each of wet AMD and DR/DME and expect that the design framework for these studies would be similar to the planned Phase 2 studies.

Additional product candidates are in preclinical development. A final lead candidate has been selected for KSI-501, a bispecific antibody biopolymer conjugate being developed for DME and uveitis. KSI-201 (a bispecific antibody biopolymer conjugate) and KSI-401 (a mono-specific antibody biopolymer conjugate) are at the pre-IND stage being developed for treatment resistant wet AMD and dry AMD, respectively.

The following chart summarizes the status of the product candidates in our current pipeline:

Program	Indication	Preclinical	Pre-IND	IND	Phase 1	Phase 2	Phase 3	Anticipated Milestone
KSI-301	wAMD/DME/DR					•		Initiate pivotal Phase 2 studies
KSI-501	DME/DR							Submit IND
KSI-201	Resistant wAMD							Submit IND
KSI-401	Dry AMD							Submit IND

#### Current Standard of Care for Wet AMD and DR

Overexpression of vascular endothelial growth factor, or VEGF, in ocular tissues is central to the pathogenesis and clinical manifestations of wet AMD and DR. VEGF is a protein produced by cells that stimulates the formation of new blood vessels, a process called neovascularization, and induces vascular permeability. In wet AMD and DR, fluid that exits from blood vessels causes swelling, or edema, of the retina and loss of vision. This loss of vision can be reversed if treated early with an anti-VEGF agent to suppress VEGF signaling. Delayed treatment or undertreatment can result in permanent retinal damage and blindness. To reach effective ocular tissue concentrations, these agents must be injected into the vitreous humor, the jelly-like substance that fills the area between the lens and retina. These injections must occur at regular intervals in order to maintain anti-VEGF effects.

Lucentis (ranibizumab), marketed by Genentech, Inc., a subsidiary of the Roche Group, in the United States and by Novartis AG outside the United States, and EYLEA (aflibercept), marketed by Regeneron Pharmaceuticals, Inc. in the United States and by Bayer HealthCare LLC outside the United States, are anti-VEGF therapies that have become the standard of care for treating wet AMD and severe forms of DR based on pivotal clinical studies in which Lucentis was injected every four weeks and EYLEA was injected every eight weeks (after three initial monthly doses in the case of wet AMD and after five initial monthly doses in the case of DR with DME). Avastin (bevacizumab), marketed for non-ocular indications by Genentech in the United States and by Roche outside of the United States, is an anti-VEGF cancer therapy that shares structural characteristics with Lucentis and is commonly used off-label to treat wet AMD and DR through intravitreal injection dosed every four weeks.

Annual worldwide sales of Lucentis and EYLEA for all indications totaled approximately \$9.6 billion in 2017. We believe that a substantial majority of these sales were in connection with the treatment of wet AMD and DR. Avastin, which is currently approved and marketed for the treatment of cancer, is also used off-label to treat wet AMD and DR. We estimate that off-label Avastin represents approximately 60% of the U.S. wet AMD market by volume. We believe that an improved anti-VEGF therapy could further increase both adoption of approved therapies and extend the duration patients remain on treatment, and thus the total addressable market opportunity in wet AMD and DR could be substantial.

#### Limitations of Current Anti-VEGF Therapies

The limitations of current anti-VEGF therapies include:

- Existing anti-VEGF therapies block VEGF activity effectively but have limited durability. We believe current anti-VEGF therapies maintain
  potent and effective drug levels in ocular tissues for three to six weeks after injection on average. But typical treatment intervals in real-world
  clinical practice are longer. When a patient's dosing cycle is extended beyond the durability of the anti-VEGF agent, and the amount of drug
  remaining in the eye falls below therapeutic levels, the disease can progress and cause cumulative and permanent retinal damage. Most wet
  AMD and DR patients will require protracted anti-VEGF therapy, possibly for life. Under these circumstances, strict adherence to the
  manufacturer's labeled treatment regimen of every four weeks for Lucentis and every eight weeks for EYLEA is challenging.
- Real-world utilization of current anti-VEGFs results in undertreatment, which diminishes effectiveness. A divergence between the efficacy of Lucentis and EYLEA in pivotal clinical trials and in the real world is evidenced in multiple studies and is increasingly recognized as an important unmet medical need. A 2017 report by the Angiogenesis Foundation suggested that the burden involved in monthly visits for evaluation and treatment causes patients and physicians to extend treatment intervals, which in turn results in undertreatment and visual outcomes that fall short of the results seen in clinical trials. For example, Lucentis was tested and failed to successfully extend the treatment interval to 12-week dosing, with patients going back to pre-treatment baseline or even losing vision at the end of the first year of treatment, on average. The Lucentis U.S. product labeling refers to this regimen as an option which is "not as effective" as monthly dosing. Recently, the FDA allowed an update to EYLEA's labeling to allow 12-week dosing, but only in the second year of treatment (after one full year of intensive treatment). The

labeling refers to it as "not as effective as the recommended every 8-week dosing." Even a small deviation from per label dosing can be devastating for vision. Missing as few as one or two injections in a year from EYLEA's recommended dosing, results in almost one line of vision lost.

- Patients are not sustaining visual acuity gains over the long term. Following exit from tightly controlled clinical trials into the real-world environment, patients, on average, lose all the gains in visual acuity that had been previously achieved.
- Damage caused by these retinal diseases may be irreversible if anti-VEGF therapy is not initiated early in the disease progression. A study in patients with diabetic macular edema, or DME, a severe form of DR, found that undertreatment in the early course of patients' disease may reduce the patients' ability to respond to anti-VEGF therapies.

#### KSI-301: Our Lead Product Candidate

Our lead product candidate, KSI-301, is a novel, clinical stage anti-VEGF biological agent that combines inhibition of a known pathway with a potentially superior ocular durability profile compared to currently marketed drugs for wet AMD and DR.

KSI-301 is a bioconjugate comprised of two components. The first component is a humanized anti-VEGF monoclonal antibody which binds to human VEGF. The antibody component is designed to be pharmacologically similar to Lucentis. The second component of KSI-301 is an optically clear phosphorylcholine-based biopolymer which is stably attached to the antibody and which is intended to augment the stability and residence time of the bioconjugate in the eye without compromising its anti-VEGF activity.

We believe that KSI-301 can be a highly differentiated treatment with an improved durability profile compared to current anti-VEGF therapies because of its design features and the associated performance benefits we have observed with KSI-301 in pre-clinical studies. These design features include (1) an ultrahigh molecular weight of 950 kDa versus 48 kDa (Lucentis) and 115 kDa (EYLEA) to increase intraocular durability, (2) a phosphorylcholine-based antibody biopolymer conjugate to increase ocular tissue bioavailability while preserving bioactivity, along with increased stability, and (3) an increased formulation strength to deliver higher molar doses of anti-VEGF (7x versus Lucentis and 3.5x versus EYLEA). We believe these qualities of KSI-301 have the potential to translate into clinically meaningful advantages over currently available therapies.

As a result, we believe that KSI-301 will (1) keep patients on mechanism for longer than currently available anti-VEGF therapies, thereby preventing repeated undertreatment through overextension of treatment intervals, (2) match the required frequency of injections to keep the patient's disease quiescent with the frequency of visits that patient and physician behavior suggest is achievable in clinical practice and (3) sustain the strong visual acuity gains of the early intensive treatment phase over the long term and outside of clinical trial contexts. By addressing the primary causes of undertreatment, KSI-301 has the potential to improve and sustain visual acuity outcomes in patients with neovascular conditions of the retina such as wet AMD and DR.

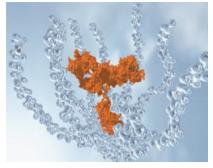


Figure: The structure of KSI-301. The branched phosphorylcholine-based biopolymer is optically clear. The bioactive antibody component is represented by the darker portion in the middle of the image. The two components are stably attached to each other, forming bioconjugate KSI-301.

## **Clinical Development**

# KSI-301 Phase 1 Clinical Study

We submitted our IND to the FDA in June 2018 for the use of KSI-301 in patients with retinal vascular diseases (including wet AMD and DR). We initiated our first-in-human, Phase 1, single ascending dose clinical study of KSI-301 in the United States in nine patients with center-involved diabetic macular edema in July 2018. Objectives of this study included assessment of ocular and systemic safety, tolerability, and establishment of a maximum tolerated dose. Three dose levels of KSI-301 were evaluated: 1.25 mg, 2.5 mg, and 5 mg, with 3 patients per cohort. We have successfully dosed all patients at the pre-planned dose levels and reached the primary safety and tolerability endpoint of the study, which occurred after each patient reached the 14-day follow up period following the single injection of KSI-301. The patients are continuing to be followed through a 12-week safety follow-up period. To date, no patients in the Phase 1 study have experienced any serious adverse events. To date, there have been no drug-related adverse events, no dose limiting toxicities and, notably, no intraocular inflammation observed at any dose. Improvements in BCVA and reductions in macular thickness on OCT have been observed at all dose levels.

The Phase 1 trial in a heavily pre-treated patient population, with eight of nine DME patients having previously received anti-VEGF therapy, was designed to evaluate safety, yet biological activity of our antibody biopolymer conjugate was demonstrated across all dose cohorts. The data are shown in the figure below.

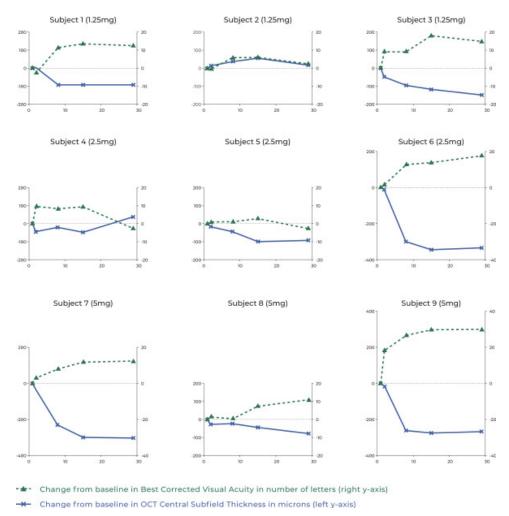


Figure-Individual patient data from KSI-301 Phase 1 study. Change from baseline over time (days post-injection – x-axis) in best corrected visual acuity score (green dashed line, right y-axis, in number of letters, *higher* is better) and central subfield thickness on OCT imaging (blue solid line, left y-axis, in microns, *lower* is better).

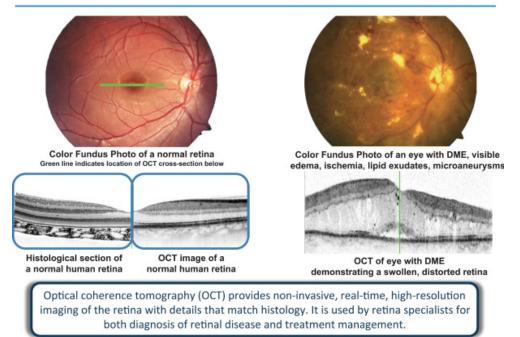
The patients enrolled in our Phase 1 study fell into four categories of patients with DME:

		Anti-VEGF treatment failure (non-responder)	Anti-VEGF sub-optimal responder	Anti-VEGF responder	Treatment Naïve
Expected response to anti-VEGF	Vision	No meaningful improvement or worsening	Mild improvements	Substantial improvements	All types of responses seen. Average of 5-9 letter improvement seen in Phase 3 clinical trials at 4 weeks*
agent	OCT (edema)	No meaningful improvement or worsening	Mild improvements	Substantial improvements	All types of responses seen. Average 120-180 micron improvement seen in Phase 3 clinical trials at 4 weeks*
Response	Vision	As expected	Substantial improvements	As expected	Improvement of 20 letters at 4 weeks
to KSI-301	OCT (edema)	As expected	Substantial improvements	As expected	Improvement of 387 microns at 4 weeks
Phase 1 Sub	ject #s	2, 4, 5	1, 8, 9	3, 7	6

\* Based on published data after one month of treatment with Lucentis or EYLEA, from RIDE, RISE, VIVID, VISTA, and DRCR.net Protocol T studies

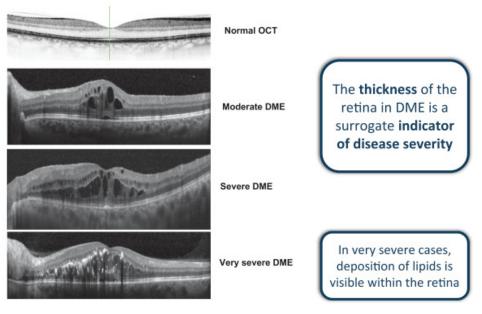
To help contextualize our results, the figure below shows example color retinal photographs and OCT images from both normal patients and a patient with DME who did not participate in our study. The extent of pathology seen in patients with DME is readily visible when comparing to the normal photograph.

# Diabetic Macular Edema: Pathology Visible on Imaging



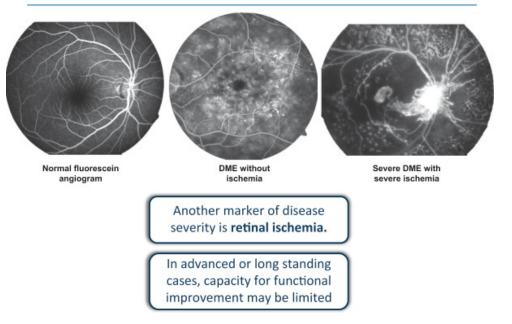
The below figure demonstrates examples of the varying severity of DME visible on OCT imaging, again from patients with DME who did not participate in our study. In contrast to the normal OCT image, the OCT images from DME patients can demonstrate disease-related changes including intraretinal cysts, intraretinal edema, intraretinal lipid deposits, and subretinal fluid.

# Diabetic Macular Edema: Pathology Visible on OCT Imaging



Finally, the below images demonstrate an example image from a fluorescein angiogram, or FA, another imaging tool used to assess retinal disease. These are also from patients who did not participate in our study. Visible in the images from DME patients are varying degrees of ischemia, vascular leakage, and neovascularization.







-26

10

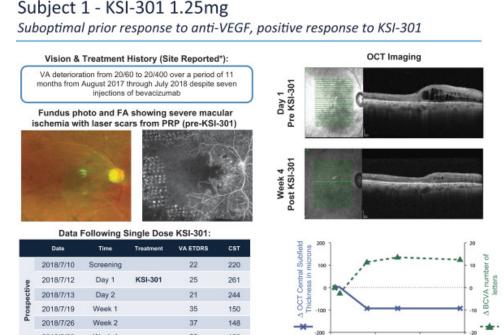
20

Time in Days

30

#### **Table of Contents**

The following figures present both pre- and post-treatment OCT images from DME patients who participated in our KSI-301 Phase 1 clinical study. Additionally, pre- and post-treatment vision data from each of the nine patients along with available historical data collected by the study sites are presented on each figure, along with pre-treatment color fundus photos and FA images in some cases. The post-treatment vision and OCT responses demonstrate bioactivity of KSI-301 at every dose level tested.



Sites asked to enter DME treatment history since Jan 1, 2018, or as available to them; thus, may not necessarily reflect all of a patient's prior DME treatments. FA, Fluorescein angiogram. PRP, panretinal laser photocoagulation

36

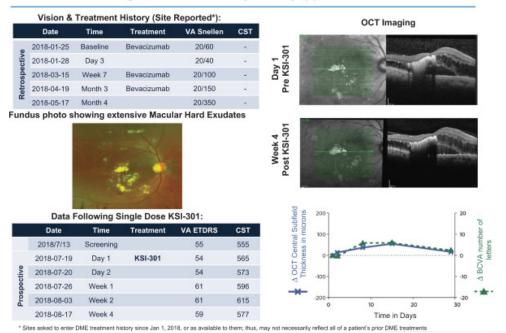
Week 4

2018/8/08

98

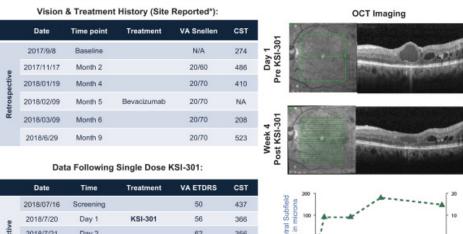
# Subject 2 - KSI-301 1.25mg

Extensive macular damage, anti-VEGF treatment failure. Safety patient.

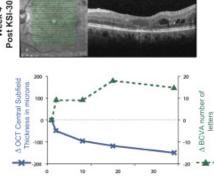


# Subject 3 - KSI-301 1.25mg

Positive response to prior anti-VEGF and response to KSI-301



2018/07/16	Screening		50	437
2018/7/20	Day 1	KSI-301	56	366
2018/7/21	Day 2		62	356
2018/7/27	Week 1		62	306
2018/8/3	Week 2		71	283
2018/8/17	Week 4		68	253
	2018/7/20 2018/7/21 2018/7/27 2018/8/3	2018/7/20         Day 1           2018/7/21         Day 2           2018/7/27         Week 1           2018/8/3         Week 2	2018/7/20         Day 1         KSI-301           2018/7/21         Day 2         2018/7/27         Week 1           2018/8/3         Week 2         1	2018/7/20         Day 1         KSI-301         56           2018/7/21         Day 2         62           2018/7/27         Week 1         62           2018/8/3         Week 2         71

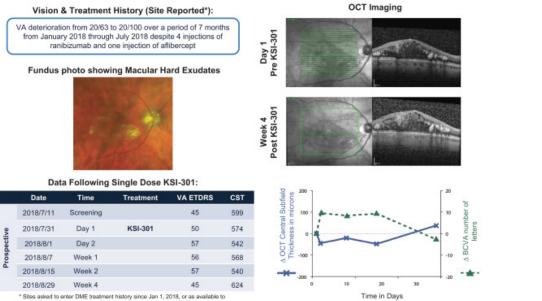


Time in Days

\* Sites asked to enter DME treatment history since Jan 1, 2018, or as available to them: thus, may not necessarily reflect all of a patient's prior DME treatments

# Subject 4 - KSI-301 2.5mg

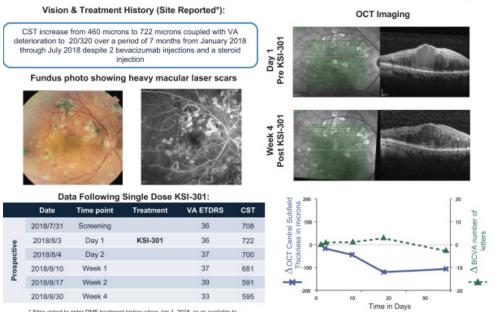
Macular damage, anti-VEGF treatment failure. Safety patient.



Sites asked to enter DME treatment history since Jan 1, 2018, or as available to them: thus, may not necessarily reflect all of a patient's prior DME treatments

# Subject 5 - KSI-301 2.5mg

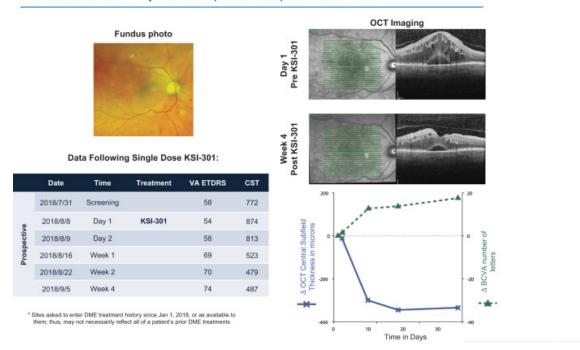
Extensive macular damage, anti-VEGF and steroid treatment failure. Safety patient.



Siles asked to enter DME treatment history since Jan 1, 2018, or as available to them; thus, may not necessarily reflect all of a patient's prior DME treatments

# Subject 6 - KSI-301 2.5mg

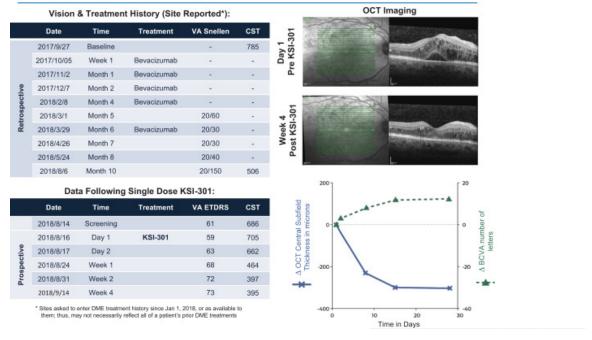
Treatment naïve\* subject with a positive response to KSI-301





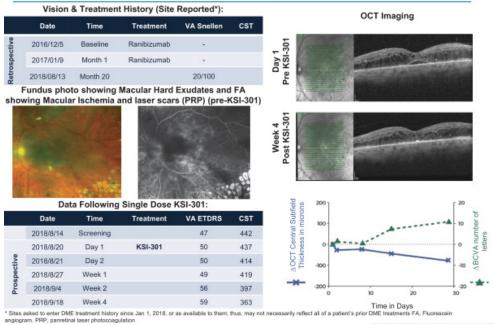
# Subject 7 - KSI-301 5mg

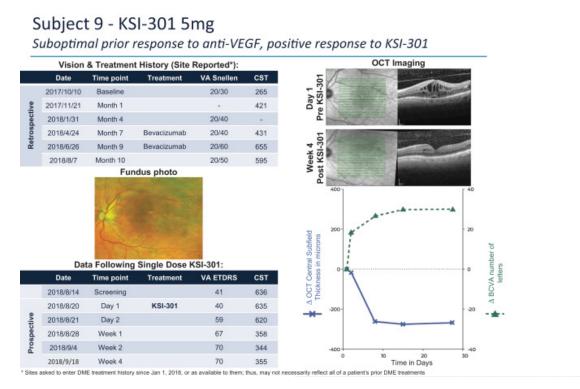
Positive response to prior anti-VEGF and positive response to KSI-301



# Subject 8 - KSI-301 5mg

Extensive macular damage, anti-VEGF suboptimal responder. KSI-301 responder





 Subject 3 (1 2 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 4 (1, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 4 (1, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 4 (1, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 4 (2, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 5 (2, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 6 (2, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 6 (2, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 6 (2, 5m)
 Subject 6 (2, 5m)
 Subject 6 (2, 5m)

 Subject 7 (2m)
 Subject 6 (2m)
 Subject 6 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

 Subject 7 (2m)
 Subject 7 (2m)
 Subject 7 (2m)

The best response from each dose level is shown in the figure below. The post-treatment vision and OCT responses demonstrate bioactivity at every dose level tested.

Our Phase 1 study demonstrated safety and bioactivity for KSI-301 and a preliminary proof of concept for KSI-301 and the ABC Platform. The Phase 1 objective was achieved, and KSI-301 was shown to be safe and well-tolerated at all three dose levels at the 14-day primary endpoint and through the 30-day follow-up visit for all subjects. No dose limiting toxicities, inflammation, or severe adverse events were observed. No maximum tolerated dose was defined as every dose level was well tolerated. Bioactivity was demonstrated at all dose levels and across a range of patient phenotypes. A pharmacodynamic effect was observed with reductions in macular edema on OCT imaging. An efficacy effect was observed with improvement in best corrected visual acuity.

### KSI-301 Planned Phase 1b and Phase 2 Clinical Studies

Having successfully met the primary endpoint of safety and tolerability in the Phase 1 study, with the additional observations around bioactivity, we plan to further evaluate the highest dose tested of KSI-301, 5 mg, in a series of global studies in wet AMD and DME/DR.

We expect to be dosing patients in a global Phase 2 study of KSI-301 in the United States in early 2019, and clinical trial applications to ex-U.S. regulatory authorities for this study are in progress. This randomized, controlled study in approximately 400 treatment naïve wet AMD patients will evaluate the non-inferiority of intravitreal KSI-301 administered as infrequently as every 16 weeks versus EYLEA (aflibercept) administered on its every 8-week labeled regimen (after three loading doses). FDA has indicated that this Phase 2 study, if successful, can be supportive of a marketing application for KSI-301 as one of two pivotal studies in wet AMD required for approval in the United States.

We also plan to initiate a Phase 2 randomized controlled clinical study of KSI-301 in DME/DR patients in the U.S. and E.U. We also expect this study to evaluate the non-inferiority of KSI-301 administered on an every

12 week or less frequent dosing schedule versus EYLEA administered on its every 8-week (labeled) regimen (after five loading doses). We plan to initiate dosing in this study by the end of 2019.

We additionally plan to initiate two Phase 2 studies in China, one in wet AMD and one in DR, and we are planning for these studies to have the same clinical design frameworks as our U.S./EU studies. We plan to file the IND in China in the first half of 2019 and initiate dosing in the second half of 2019.

In parallel to initiating our Phase 2 studies, we intend to expand the scope of the Phase 1 study into a Phase 1b open label study to evaluate the treatment effect and safety of sequential doses of KSI-301 in approximately 30 to 45 patients with wet AMD, DME/DR and macular edema due to retinal vein occlusion, or RVO, another important but less-common retinal vascular disease for which both EYLEA and Lucentis are FDA-approved. In the Phase 1b study, we intend to conduct more intensive ophthalmic imaging and ocular pharmacokinetic assessments over the 36-week treatment duration to define the profile of KSI-301 in the context of existing and emerging data in the field.

#### **Our Strategy**

Our goal is to become a leading biopharmaceutical company focused on developing and commercializing therapeutics for the treatment of ophthalmic diseases. The key elements of our strategy are:

- Complete clinical development of KSI-301 for wet AMD and DR. We are devoting a significant portion of our resources and business efforts to the clinical development of KSI-301 for wet AMD and DR. We anticipate initiating a Phase 2 wet AMD study of KSI-301 in the U.S. and EU in early 2019 to evaluate the non-inferiority of intravitreal KSI-301 administered as infrequently as every 16-weeks versus EYLEA. The FDA has indicated this study, KSI-CL-102, if successful, can be supportive of a marketing application for KSI-301. We are thus designing and intend to execute this Phase 2 study as a pivotal study. We also plan to initiate a Phase 2 clinical trial of KSI-301 in the U.S. and EU in DR patients. We also plan to initiate two Phase 2 studies in China, one in wet AMD and one in DR, and we are planning for these studies to have the same clinical design frameworks as our U.S. and EU studies. We plan to perform an administrative interim analysis of our Phase 2 data after approximately 200 patients (100 on KSI-301 and 100 on EYLEA) have been treated for approximately 6 months, to evaluate both the comparative vision outcomes at that point for KSI-301 and EYLEA as well as the KSI-301 [06] (once every 12 weeks)/Q12W (once every 12 weeks) durability proportion. We expect to undertake this administrative interim analysis in our China Phase 2 studies but plan to include the potential for this interim analysis in our global Phase 2 wet AMD protocol as well. We may use the results of this interim analysis to inform future activities related to KSI-301. In parallel to our Phase 2 programs, we are expanding the scope of our Phase 1 study into a Phase 1b open label design to evaluate the safety and treatment effect of sequential doses of KSI-301 in patients with wet AMD and DR.
- Establish market acceptance of KSI-301 in wet AMD and DR. We believe that if KSI-301 is approved and is shown to have comparable
  efficacy and improved durability to other anti-VEGF therapies, it will compete favorably with other marketed products for wet AMD and DR.
  In addition, we believe KSI-301 may potentially expand the market reach to patients not currently on approved standard of care therapies or not
  currently on therapy at all.
- Seek to expand the use of KSI-301 in DR beyond DME. We intend to explore the use of KSI-301 in the treatment of all subtypes of DR patients. Currently marketed anti-VEGFs are used primarily to treat late and advanced manifestations of DR, particularly DME. We believe that the improved durability of KSI-301 has the potential to not only improve the standard of care but also expand the patient population that receives anti-VEGF therapy to include patients with less severe forms of DR for whom frequent injections may be a barrier to adoption.
- Commercialize KSI-301 with our own specialty sales force. KSI-301 is wholly-owned by us. If KSI-301 receives marketing approval, we plan to commercialize it in the United States with our own focused, specialty sales force. We believe that retinal specialists in the United States, who perform most of the medical procedures involving retinal diseases, are sufficiently concentrated that we will be able to

effectively promote KSI-301 with a sales and marketing group of fewer than 200 people. We expect to explore collaboration, distribution or other marketing arrangements with one or more third parties to commercialize KSI-301 in markets outside the United States.

- Advance the development of our other ABC product candidates. We intend to continue deploying capital to selectively develop our own
  portfolio of product candidates based on our ABC Platform (including bispecific inhibitors such as KSI-501). We may partner with
  biotechnology and pharmaceutical companies to further develop our ABC Platform and product candidates.
- Discover and develop future product candidates for areas of unmet need. We intend to continue our discovery efforts and deepen our pipeline of medicines for high prevalence ophthalmic diseases. We may opportunistically in-license or acquire the rights to complementary products, other product candidates and technologies to aid in the treatment of a range of ophthalmic diseases, principally diseases of the retina.

### **Market Opportunity**

## Wet AMD

## Overview of Wet AMD

AMD is a common eye condition affecting people of age 55 years and older with a reported prevalence of approximately 11 million people in the United States and 170 million people globally. It is a progressive disease affecting the central portion of the retina, known as the macula, which is the region of the eye responsible for sharp, central vision and color perception. The likelihood of AMD progression and associated vision loss increases with age.

Wet AMD is an advanced form of AMD characterized by neovascularization and fluid leakage under the retina. It is the leading cause of severe vision loss in patients over the age of 50 in the United States and the EU, with a reported prevalence of approximately 1.25 million people and an annual incidence of approximately 200,000 people in the United States. The likelihood of disease progression increases with age, so the prevalence and incidence of wet AMD is projected to accelerate in countries with aging populations. It has additionally been observed that approximately 50% of patients presenting with wet AMD in one eye will develop wet AMD in the other eye within five years, leading to a relatively significant number of patients requiring treatment in both eyes. While wet AMD represents only 10% of the number of cases of AMD overall, it is responsible for 90% of AMD-related severe vision loss. In many eyes with wet AMD results in blood vessel leakage, fluid in the macula, and ultimately scar tissue formation, which can lead to permanent vision loss, or even blindness, as a result of the scarring and retinal deformation that occur during periods of non-treatment.

#### Current Therapies for Wet AMD

The standard of care treatments for wet AMD are two anti-VEGF drugs, Lucentis (ranibizumab) and EYLEA (aflibercept). Lucentis (ranibizumab), marketed by Genentech, Inc., a subsidiary of the Roche Group, in the United States and by Novartis AG outside the United States, is a recombinant humanized monoclonal antibody fragment that binds to and inhibits VEGF proteins in the eye and was approved in the United States in 2006 and in Europe in 2007. EYLEA (aflibercept), marketed by Regeneron Pharmaceuticals, Inc. in the United States and by Bayer HealthCare LLC outside the United States, is a recombinant fusion protein containing portions of the human VEGF receptor that binds to soluble VEGF and was approved in the United States in 2011 and in Europe in 2012. These drugs became the standard of care for treating wet AMD based on pivotal clinical trials in which Lucentis was injected every four weeks and EYLEA was injected every eight weeks (after three initial monthly loading doses). Since its approval, EYLEA has been widely adopted largely due to a durability advantage compared to Lucentis, but both agents were effective in improving visual acuity in the first months of the treatment period and sustaining this gain throughout the duration of their respective clinical trials. Avastin (bevacizumab), marketed for non-ocular indications by Genentech in the United States and by Roche outside of

<sup>109</sup> 

the United States, is an anti-VEGF cancer therapy that shares structural characteristics with Lucentis and is commonly used off-label as a monthly, intravitreal injection for wet AMD.

#### Total Market for Wet AMD

Annual worldwide sales of Lucentis and EYLEA for all indications totaled approximately \$9.6 billion in 2017. We believe a substantial majority of these sales were in connection with the treatment of wet AMD and DR. Avastin, which is currently approved and marketed for the treatment of cancer, is also used off-label to treat wet AMD and DR. We estimate that off-label Avastin represents approximately 60% of the U.S. wet AMD market by volume. We believe that an improved anti-VEGF therapy could further increase both adoption of approved therapies and extend the duration patients remain on treatment, and thus the total addressable market opportunity in wet AMD and DR could be substantial.

With an improved anti-VEGF therapy, we believe the total addressable market opportunity in wet AMD could be substantially greater than sales of Lucentis and EYLEA in wet AMD and DR. A clinically meaningful durability advantage over existing treatments could increase long-term compliance rates and maintain patients on a consistent and FDA approved treatment regimen for this chronic condition. Furthermore, we believe that an anti-VEGF therapy that is more durable than Avastin may reduce the relative weight of cost as a deciding factor for patients and providers who currently favor Avastin and expand the market for "branded" treatments.

## Diabetic Retinopathy

#### Overview of Diabetic Retinopathy

DR is an eye disease resulting from diabetes, in which chronically elevated blood sugar levels cause damage to blood vessels in the retina. There are two major types of DR:

- Non-proliferative DR, or NPDR. NPDR is an earlier, more typical stage of DR and can progress into more severe forms of DR over time if untreated and if exposure to elevated blood sugar levels persists.
- Proliferative DR, or PDR. PDR is a more advanced stage of DR than NPDR. It is characterized by retinal neovascularization and, if left untreated, leads to permanent damage and blindness.

DME, which occurs when fluid accumulates in the macula due to leaking blood vessels, can develop at any stage of DR. PDR, together with DME, are the primary causes of vision-threatening DR, or VTDR. VTDR is the leading cause of blindness among people with diabetes and the leading cause of blindness among working age adults in the United States and the EU. Patients with mild or moderate NPDR who have not developed DME are characterized as patients with non-vision threatening DR, or NVTDR.

#### Current Therapies for DR

PDR has historically been treated with laser therapy. In recent years, use of anti-VEGF therapies has emerged as a complementary first-line treatment for PDR. Lucentis and EYLEA are also approved for the treatment of DME with or without PDR. In April 2017, Lucentis' approval was expanded to include all forms of DR, whether or not the patient also has DME. The approval was based on the demonstration that treatment with Lucentis results in more patients experiencing improvement of their diabetic retinopathy severity (disease regression). In March 2018, Regeneron announced results from its ongoing study in which EYLEA demonstrated it can reverse disease progression in patients with moderately severe to severe NPDR when administered on average 4.4 times over 24 weeks.

The first-line interventions for NVTDR are observation, lifestyle changes and treatment of underlying diabetes. In practice, anti-VEGF therapies are not commonly prescribed for patients with NVTDR. However, results from the RISE and RIDE trials for Lucentis showed that anti-VEGF therapies can slow disease progression in patients with NPDR as well as induce regression.

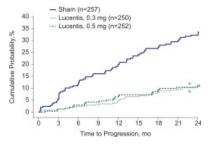


Figure: Time to disease worsening (DR progression as defined by a composite endpoint) from baseline in DME patients with NPDR treated with sham procedures vs. Lucentis.

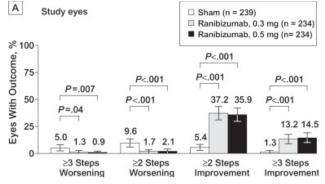


Figure: Proportion of subjects improving or worsening per treatment arm.

#### Total Market for DR

According to the Center for Disease Control, or CDC, and National Institutes of Health, or NIH, (1) an estimated 30 million people in the United States have diabetes, with approximately 1.5 million additional people in the United States diagnosed with diabetes each year, and (2) 285 million people worldwide have diabetes. We estimate that the number of people in the United States and the EU with DR in 2015 was approximately 28.5 million. According to the NIH, the number of Americans with DR is expected to nearly double from 2010 to 2050. The CDC estimates that approximately 900,000 Americans are affected by VTDR. We believe a substantial majority of the \$9.6 billion in sales of Lucentis and EYLEA in 2017 were for the treatment of wet AMD and DR. Furthermore, we believe that the frequent injections required by current anti-VEGF therapies may dissuade patients with mild or asymptomatic forms of DR from accepting treatment. A more durable agent such as KSI-301 could be attractive for these untreated patients and extend the anti-VEGF market to include patients with NVTDR.

## **Limitations of Current Anti-VEGF Therapies**

The underlying pathophysiology of both wet AMD and DR are responsive to anti-VEGF drugs. Both conditions suffer from the limitations of current anti-VEGF therapies such as limited on-mechanism durability and frequent dosing intervals. On-mechanism durability is a function of the time that therapeutic levels are sustained in the ocular tissues. Data suggest that the effectiveness of Lucentis and EYLEA in clinical practice is inferior to the

results seen in well-controlled clinical studies, an observation attributed to insufficiently frequent dosing and resulting undertreatment even, in the case of EYLEA, with its labeled eight-week regimen. Other studies show that while patients may benefit from anti-VEGF therapies in the early treatment phase, they may fail to sustain their visual acuity gains over the long term. Clinical studies have also shown that non-treatment or undertreatment with anti-VEGF agents in the months or years after disease onset may reduce the benefit of anti-VEGF therapies once therapy is initiated. These factors contribute to permanent and unnecessary vision loss for many patients.

## Existing anti-VEGF therapies block VEGF activity effectively but have limited durability.

Wet AMD and DR are chronic and progressive diseases that require protracted treatment, possibly for life. Currently available anti-VEGF agents have relatively short durability. To maintain effective drug levels in the eye, existing anti-VEGF treatments must be administered on a frequent and sustained schedule. Lucentis was approved based on a monthly dosing interval. EYLEA was approved based on a dosing interval of every eight weeks (following three initial, monthly loading doses). The most accepted sign of disease activity in wet AMD for retina specialists worldwide is recurrent accumulation of fluid in the macula, as determined by evaluating the retinal thickness and anatomic appearance with OCT. As can be seen in the figure below, when EYLEA or Lucentis are dosed on a Q4W (once every four weeks) regimen, the retinal thickness remains stable between doses, as measured on OCT. However, when EYLEA dosing is shifted to its Q8W (once every eight weeks) labeled regimen, the retina expands and contracts as it begins to swell with fluid before its next retreatment, exhibiting a seesaw pattern that we refer to as OCT flutter. This suggests that, although vision outcomes are comparable on average between fixed-interval 4-weekly and 8-weekly dosing, EYLEA's durability and ability to maintain disease control as measured by OCT is less than the approved 8-week per-label dosing.

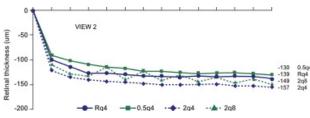


Figure: Retinal thickness (y-axis), measured in nanometers, decreases upon treatment with EYLEA. Rq4 = Lucentis every four weeks; 0.5q4 = EYLEA 0.5mg every four weeks; 2q4 = EYLEA 2mg every four weeks; 2q8 = EYLEA 2mg every eight weeks.

The clinical implication is that when a patient's dosing cycle is extended beyond the durability of the anti-VEGF agent and the amount of drug remaining in the eye falls below therapeutic levels, disease activity can recur. At this point, the disease can progress and begin to cause cumulative and possibly permanent retinal damage. To this point, the EYLEA product labeling in the United States notes that "some patients may need every 4-week (monthly) dosing after the first 12 weeks (3 months)."

Additional evidence of the recognition of limited durability is seen in the FDA's evaluation of both Lucentis and EYLEA. Lucentis was tested for its potential to reach quarterly dosing in a Phase 3b study; it failed to successfully deliver the same efficacy results as monthly dosing. The FDA did accept dosing every three months after three initial monthly loading doses in the Lucentis product labeling, with the following wording: "Although not as effective, patients may be treated with 3 monthly doses followed by less frequent dosing with regular assessment. In the 9 months after three initial monthly doses, less frequent dosing with 4-5 doses on average is expected to maintain visual acuity while monthly dosing may be expected to result in an additional average 1-2 letter gain. Patients should be assessed regularly." The loss of one line of vision translates into patients going back to baseline or even losing vision at the end of the first year of treatment, on average. Furthermore, the required wording of regular assessments means that the high burden of frequent office visits remains. For EYLEA, recently, the FDA updated the product labeling to allow 12-week dosing but only in the second year of treatment, after one full year of intensive treatment. The labeling refers to it as "not as effective as the recommended every 8-week dosing." For both Lucentis and EYLEA, the recommended fixed interval dosing of monthly and bimonthly, respectively, appear to result in the best and most consistent visual acuity results, with all flexible or less-frequent dosing intervals labeled by FDA as "not as effective."

### Real-world utilization of current anti-VEGF therapies results in undertreatment which diminishes effectiveness.

Extended treatment intervals caused by the burden of frequent treatments causes undertreatment and visual outcomes that fall short of the results seen in pivotal clinical trials.

Compared to Lucentis' pivotal trials in wet AMD, ANCHOR and MARINA, where initial vision gains are maintained with monthly dosing over two years, a variety of studies have shown that the initial gains (if achieved) are not maintained, on average, after the initial loading phase.

This is clearly seen in AURA, a multi-country real-world practice study of Lucentis. The visual acuity improvement seen in AURA falls significantly short of the visual acuity improvement that patients showed in MARINA and ANCHOR. A gradual loss of the initial vision gains can be seen as early as three months after initiation of treatment as depicted in the graph below. A key finding in AURA is that populations that received less frequent anti-VEGF treatment tended to experience less improvement in visual acuity, on average, as illustrated in the table below.

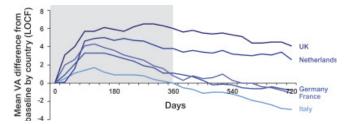


Figure: Vision gains seen in the AURA study over time for all patients by country (adapted from Holz et al). \*Last observation carried forward analysis.

Country	N	Mean injections in full 2 years	Change in VA score to day 90*	Change in VA score to year 1*	Change in VA score to year 2*	Mean VA score at year 2*
UK	410	9.0	5.7	6.0	4.1	59.0
The Netherlands	350	8.7	4.6	3.8	2.6	52.4
France	398	6.3	4.1	0.8	-1.1	54.4
Germany	420	5.6	3.3	1.1	-0.8	51.9
Italy	365	5.2	1.4	0	-2.9	62.7

#### Table: Summary of changes in visual acuity (VA) score from baseline and number of injections over two years, per country. \*Last observation carried forward analysis.

Consistent with the AURA study, an observational study following patients who completed the SEVEN UP and HORIZON trials for Lucentis in wet AMD showed a correlation between the number of injections and level of visual acuity benefit. Patients who received 11 or more injections during

wet AMD showed a correlation between the number of injections and level of visual acuity benefit. Patients who received 11 or more injections during the period from four to eight years after they exited the pivotal clinical trial were more likely to experience improved vision (average gain of 3.9 letters) than patients who received six to ten injections during the same period (average loss of 6.9 letters).

Latter abange:	No	1-5	6-10	≥11
	injections	injections	injections	injections
	(n=26)	(n=11)	(n=11)	(n=14)
Letter change: SEVEN UP vs HORIZON exit	-8.7	-10.8	-6.9	$+3.9^{1}$

 $^{1} p < 0.05$ 

## Table: Mean letter change from HORIZON to SEVEN UP by total number of anti-VEGF treatments.

The implication of these data is that in clinical practice and outside of clinical studies, patients are receiving fewer injections than the labeled regimens for Lucentis (12 per year) and EYLEA (seven to eight in the first year and six in

subsequent years). In 2017, the Angiogenesis Foundation reported that in routine clinical practice, 65% of wet AMD patients receive six or fewer injections during the first year of treatment. Likewise, a recent publication from the American Academy of Ophthalmology's IRIS (Intelligent Research In Sight) patient registry showed that, in 13,859 U.S. patients with wet AMD, the average number of injections in the first year of treatment was approximately six.

As illustrated in the top right of the figure below, data regarding long-term anti-VEGF treatment show that visual acuity outcomes are positively correlated with number of injections, with the greatest benefit seen when therapies are used at 10.5 or more injections per year reflecting high intensity, fixed Q4W or Q8W dosing.

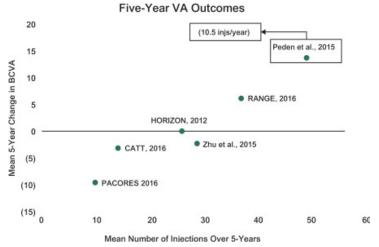


Figure: Five-year visual acuity outcomes versus injection frequency for three or more years in AMD.

In real-world practice, even a small deviation from per-labeled dosing can result in significant vision loss. In the PERSEUS Study, the real-world effectiveness of EYLEA was evaluated in patients treated per-label (regular treatment) compared to patients treated irregularly. Patients treated regularly received a mean of 7.4 injections compared to 5.2 in the irregular treatment group. The initial vision gains seen after the loading doses started to decrease at month four, with vision returning, on average, to almost baseline in the irregularly treated patients, as shown in the graph below. The difference in vision of 4.6 letters gained between the two groups is statistically significant, and, more importantly represents almost a line (five eye chart letters) of vision difference on average, which is recognized in the field as clinically meaningful. Additionally, in this study, the majority of patients (70.5%) did not receive regular treatment.

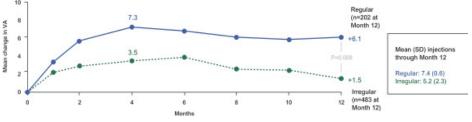


Figure: mean change in visual acuity for regularly and irregularly treated patients in the PERSEUS Study (effectiveness set)

Real-world outcomes of anti-VEGF treatment in patients with DME show similar patterns to wet AMD. For instance, a recently published report of electronic health records real-world data from 15,608 DME patient eyes

showed that patients on average receive fewer injections over 12 months and have meaningfully worse visual acuity outcomes compared to randomized controlled trials.

#### Patients are not sustaining visual acuity gains over the long term.

Patients treated with anti-VEGF agents can sustain visual acuity gains over time if they adhere to a tighter dose frequency. Results from the VIEW 1 extension study demonstrate that it is possible for patients treated with anti-VEGF agents to sustain visual acuity gains over time, as long as patients adhere to a tighter dose frequency that is closer to the labeled regimen. In the early intensive treatment phase, patients in VIEW 1 achieved a ten-letter visual acuity gain, which they then maintained over two years on a Q8W regimen. At the end of two years, patients shifted into a less-intensive clinical monitoring regimen and into a more flexible dosing regimen in which they were required to maintain at least Q12W dosing. In this hybrid setting, patients showed a slow but steady decrease in average visual acuity from ten letters to seven letters; however, their average visual acuity did not drop to pretreatment levels or below.

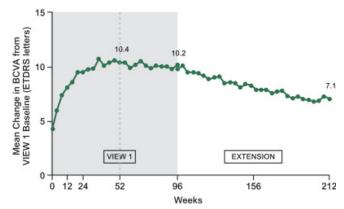


Figure: Mean visual acuity and 95% confidence interval for 647 patients in the Comparison of Age-Related Macular Degeneration Treatments Trials Follow-up Study: (A) overall and by drug assigned in the clinical trial and (B) overall and by dosing regimen assigned in the clinical trial. PRN = "as needed."

As mentioned above, AURA and many other real-world practice studies show that the vision gains seen in tightly controlled clinical trials are not transferrable to clinical practice. A United Kingdom study of approximately 93,000 Lucentis injections reviewed EMRs of thousands of patients treated outside the context of clinical trials. On average, patients received a median of 5, 4, and 4 injections of Lucentis over years one, two and three, respectively. The study found that although patients showed early improvement, they regressed, on average, to pretreatment levels by the end of year two with continued deterioration below their starting visual acuity by year three, as shown in the chart below.

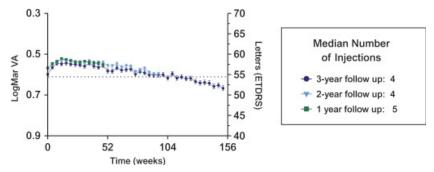


Figure: Mean visual acuity (VA), as measured by letter score, over time comparing patients with follow-up of at least 1, 2 or 3 years.

<sup>115</sup> 

More importantly, with many patients losing vision, during the study follow-up many patients experienced new sight impairment (29.6%, 41%, 48.7% and 53.7% in years one, two, three and four, respectively) and even new cases of blindness (5.1%, 8.6%, 12% and 15.6% in years one through four, respectively).

In the United States, an EMR study of 7,650 eyes treated with Lucentis and EYLEA outside of the clinical trial setting showed that these therapies improved patients' visual acuity less in practice than they do in clinical trials. Further, by the end of the first year of treatment, patients' average visual acuity had deteriorated below their pretreatment levels.

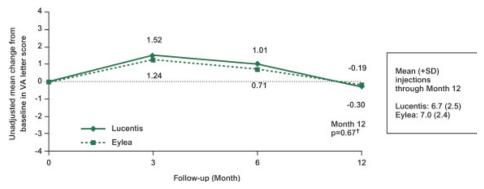


Figure: Mean change in visual acuity (VA) letter score at 3, 6 and 12 months in the first year of treatment. VA was lower at 12 months than at the beginning of treatment.

When patients leave the tightly controlled clinical trial environment, their eyesight, on average, falls to pretreatment levels. In practice, anti-VEGF therapies are not delivering the level of benefit that their pivotal clinical trials suggested. In the pivotal Lucentis trials MARINA and ANCHOR, patients were able to gain and maintain vision gains with monthly dosing over two years. After exiting the clinical trials, patients were followed in the HORIZON study with as needed dosing (Pro Re Nata or PRN) for three more years. Gradual vision decline can be seen immediately after exiting the trials, returning to pre-treatment baseline vision before the end of the third year of follow-up in HORIZON.

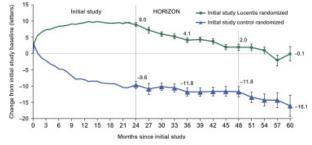
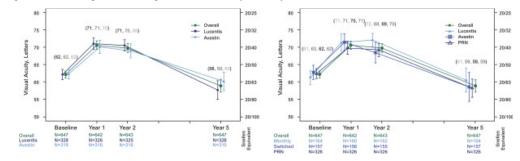


Figure: Mean change in visual acuity (VA) letter score in MARINA and ANCHOR (years one and two) and in HORIZON (years three to five). VA gradually decreased immediately after the patients exited monthly dosing in a clinical trial setting.

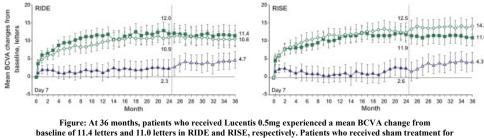
116

A study funded by the National Eye Institute followed patients who left the tightly controlled clinical trial environment into clinical practice and showed that these patients, on average, lost all the gains in visual acuity that they obtained while enrolled in the trial.



## Undertreatment in the early course of patients' disease risks the patients' ability to benefit from anti-VEGF therapies after the passage of time.

After disease onset, how soon patients receive appropriate treatment is important to whether they can respond to treatment. Failure to appropriately treat neovascularization in the early period may reduce patients' ability to respond to anti-VEGF therapies as the disease progresses, possibly leading to irreversible damage. In the RIDE/RISE clinical studies of Lucentis in DR, patients who received Lucentis saw an increase in visual acuity of 10 to 12 letters at month 24. Patients who received sham treatment (a procedure that is intended to mimic a therapy in a clinical trial as closely as possible without having any actual efficacy) for 24 months saw no benefit. At the 24-month mark, the patient arms were crossed over, such that the patients who had initially received sham treatment now began to receive Lucentis. These patients were only able to improve by four letters by year three. The interpretation is that the unchecked disease progression in the initial period damaged the retina to such an extent that patients were subsequently unable to respond to Lucentis to the same degree as patients treated with Lucentis earlier in their disease process.



baseline of 11.4 letters and 11.0 letters in RIDE and RISE, respectively. Patients who received sham treatment for 24 months and then crossed over to Lucentis 0.5mg experienced a diminished benefit in mean best corrected visual acuity change from baseline at 36 months of 4.7 letters and 4.3 letters in RIDE and RISE, respectively.

## Conclusions

There is a significant and urgent unmet medical need to find better therapeutic options for patients with neovascular diseases of the retina that can:

- keep patients on mechanism for longer than currently available anti-VEGF therapies, thereby preventing repeated undertreatment by overextending treatment intervals and thus avoiding latent recurrence of retinal edema;
- match the required frequency of injections to keep the patient's disease quiescent with the frequency of visits that patient and physician behavior suggest is achievable in practice;

117

- · sustain the strong visual acuity gains of the early intensive treatment phase over the long term and outside of clinical trial contexts; and
- provide a tolerable treatment regimen even for patients who are early in the course of their disease, so they can achieve the maximal benefit of anti-VEGF therapy.

In the 2018 Preferences and Trends Survey conducted by the American Society of Retina Specialists, retina specialists worldwide cited both reduced treatment burden and long-acting durability as the greatest unmet needs regarding wet AMD treatment.

## **Our Lead Product Candidate: KSI-301**

Our lead product candidate, KSI-301, is a novel, clinical stage anti-VEGF biological agent that combines inhibition of a known pathway with a potentially superior on-mechanism durability profile compared to currently marketed drugs for wet AMD and DR. By addressing the primary causes of undertreatment, KSI-301 has the potential to improve and sustain visual acuity outcomes in patients with neovascular conditions of the retina such as wet AMD and DR.

## Components of KSI-301

KSI-301 is a bioconjugate comprised of two novel components. The first component is a recombinant, full-length humanized anti-VEGF monoclonal antibody. The second component is a branched, optically clear phosphorylcholine biopolymer. The antibody is conjugated to the biopolymer in a one-to-one ratio through a stable and site-specific chemical linkage to form the antibody biopolymer conjugate. The molecular weight of KSI-301 is approximately 950,000 Daltons (Dalton is a standard measure of molecular weight), of which approximately 150,000 Daltons are attributable to the biopolymer component. It is well-established that substances, when injected intravitreally, with a smaller molecular weight will be cleared from ocular tissues more quickly than larger substances.



Figure: Functional structure of the KSI-301 antibody biopolymer conjugate. CH – constant heavy, CL – constant light, VH – variable heavy, VL – variable light, **★** – Complementarity Determining Regions (CDR).

## Antibody Intermediate

The antibody intermediate of KSI-301 consists of a humanized anti-VEGF antibody. KSI-301 behaves pharmacologically similar to Lucentis by inhibiting VEGF-mediated neovascularization and vascular permeability.

#### Biopolymer Intermediate

The biopolymer component is a branched, optically clear phosphorylcholine biopolymer. Phosphorylcholine is a naturally occurring phospholipid head group present on the external surface of mammalian cellular membranes. Phosphorylcholine demonstrates physiological inertness that has been attributed to its molecular structure, where a

permanent positive charge on the nitrogen group is equally balanced by a negative charge on the phosphate, yielding a net neutral charge over a wide range of conditions. Because of these biophysical properties, phosphorylcholine-based materials demonstrate super-hydrophilic properties in which they bind large amounts of water molecules very tightly, to create what we call "structured water." Phosphorylcholine is used successfully in marketed medical materials as the key water control monomer, in particular as a hydrogel in certain contact lenses and as a polymeric surface coating in certain cardiac drug-eluting stents. In these applications, phosphorylcholine containing monomers are polymerized via "uncontrolled" free radical polymerization. For an external hydrogel application (contact lens) and an internal surface coating application (drug eluting stent), control of molecular weight and architecture are not important performance attributes. Kodiak's objective was to incorporate phosphorylcholine into well-controlled biomaterials to use as conjugates for soluble, injectable medicines such as biopharmaceuticals. In such an application, control of molecular weight and architecture are important manufacturing and performance parameters. Therefore, we used controlled "living" polymerization techniques to build precise, star-shaped, high molecular weight, well-characterized phosphorylcholine-based biopolymers that preserve functional chemistry for subsequent conjugation to biologically active proteins and, once conjugated, bring a highly structured water environment into close proximity with the bioactive antibody's target binding regions. We are also applying these controlled "living" polymerization techniques to develop phosphorylcholine-based biopolymers as copolymers of phosphorylcholine-containing and drug-containing comonomers to build chemistry-based product candidates that we believe may demonstrate high bioccompatibility, high drug loading and sustained release of small molecule drugs for ophthalmology app

## Characteristics of KSI-301

We believe that KSI-301 can be a highly differentiated treatment with an improved durability and bioavailability profile compared to current anti-VEGF therapies due to the following design features and resulting performance benefits we have observed with KSI-301 in our preclinical development:

- Design feature: KSI-301's ultra-high molecular weight of 950,000 Daltons as compared to 115,000 for EYLEA, 48,000 for Lucentis and 27,000 for brolucizumab
  - Associated performance benefits:
    - 3x improvement in key ocular pharmacokinetic parameters of KSI-301, as compared to the standard of care anti-VEGF agents
    - >100x ocular concentration advantage at two months post-dosing of KSI-301, as compared to the standard of care anti-VEGF agents
  - Design feature: KSI-301's phosphorylcholine-based ABC Platform
    - Associated performance benefits:
      - 4x increase in key target ocular tissue bioavailability, as compared to EYLEA
      - · Same or increased bioactivity, as compared to the standard of care anti-VEGF agents
      - Increased stability and resistance to degradation of bioconjugates compared to therapeutic proteins
- Design feature: KSI-301's increased formulation strength of 50 mg/mL as compared to 40 mg/mL for EYLEA and 10 mg/mL for Lucentis, as measured by weight of protein moiety
  - Associated performance benefits:
    - 3.5x and 7x higher number of anti-VEGF binding sites per dose, as compared with EYLEA and Lucentis, respectively

We believe that the aggregated effects of these properties will afford KSI-301 a longer on-mechanism durability that will more closely match the frequency of physician visits that is realistic for patients in clinical practice.

We also believe that these properties along with KSI-301's delivery by intravitreal injection position it favorably compared to other therapies being studied in the clinic with the aim of long-interval dosing in wet AMD and DR. For example, both gene therapy and an implantable drug reservoir require the patient to undergo surgery, which is generally riskier than an intravitreal injection. This need for surgery may reduce the likelihood that those technologies could be useful for or adopted by a broad range of physicians and patients, especially those patients with earlier-stage disease. An implantable drug reservoir also leaves a foreign body permanently in the eye, with an attendant increased risk of infection. Coated microsphere drug depots that deliver small-molecule receptor tyrosine kinase inhibitor drugs into the eye may leave a foreign residual material, which may cause visual symptoms and/or other safety problems. Additionally, receptor tyrosine kinase inhibitor drugs affect signaling through additional receptors other than VEGF receptor; the effects on the eye of this additional receptor inhibition, either good or bad, are not yet known. Finally, bispecific antibodies that target VEGF as well as other angiogenic signaling pathways are attempting to increase durability of treatment effect through targeting of yet-unvalidated biologic pathways, but the antibodies being used are the same size as typical monoclonal antibodies (~150 kDa) and we believe they do not have any unique size or half-life extending properties.

1	2	n
I	4	U

### Trajectories in Field of Medicines Development for Retinal (Intravitreal) Therapies

Since the initial FDA approval of Lucentis in 2006 as a monthly therapy for wet AMD, efforts have been made to improve the durability of intravitreal anti-VEGF therapy. Primarily, two parameters have been varied: size of molecule and amount of injected dose. First, increasing molecular weight, which can increase durability or ocular pharmacokinetics, or PK, in the eye because a larger molecule can lead to a slower exit from the eye. For example, Lucentis has a molecular weight of 48 kDa whereas EYLEA, approved in 2011, has a molecular weight of 115 kDa. The second parameter is increasing the formulation strength (concentration) to increase the effective dose of anti-VEGF, given the limited volume of medicine that can be injected intravitreally in a single administration. This increases effective durability by keeping drug concentrations in the eye above a minimal threshold for longer periods of time. For example, EYLEA has a 2x molar equivalence to Lucentis. In designing KSI-301, we addressed both parameters: first, increasing the molecular weight to 950 kDa through our ABC approach, and second, increasing the molar strength through a high concentration formulation of 50 mg/mL (by weight of protein). Of note, some recently developed therapeutic candidates have leveraged one parameter at the expense of the other. For example, brolucizimab was tested in Phase 3 (data available in 2017) at a high concentration and thus high injected dose level, giving it a high molar strength (22x of Lucentis), but with a molecular weight of only 27 kDa the duration of each molecule in the eye is less that not of Lucentis. Clinically, the Phase 3 result was that roughly half of patients were able to be maintained on 12 week dosing, and the remainder required 8 week (or more frequent) dosing. We believe our design decisions for KSI-301 may provide increased durability. The following figure illustrates these concepts.

Drug:	Brolucizumab	Lucentis	Eylea	KSI-301
DR/DME Format	scFv fragment	Fab fragment	VEGFR1/2 Fc-fusion protein	Antibody Biopolymer Conjugate (ABC)
Molecular structure	•	*		
Molecular weight	26kDa	48 kDa	115 kDa	950 kDa
Clinical dose	6.0 mg	0.3-0.5 mg	2.0 mg	5.0 mg (intended)
Equivalent molar dose	22	1	2	7
Equivalent ocular PK	<1	1	1.5	3
Equivalent ocular concentration at 3 months	<1	1	103	106

scFv – single chain fragment variable CH – constant heavy, CL – constant light, Fab – fragment antigen-binding, Fc – fragment crystallizable, VEGFR – vascular endothelial growth factor receptor, VH – variable heavy, VL – variable light, – CDR regions. PK – pharmacokinetics. Equivalent values are showed as fold changes relative to Lucentis.

## Affinity for and Inhibition of VEGF

The therapeutic activity of KSI-301 is driven by its antibody component, OG1950, which (1) binds to VEGF and (2) prevents VEGF from carrying out its functions that promote neovascularization and increase vascular permeability. Our preclinical tests have demonstrated that OG1950 and KSI-301 bind to VEGF with similar affinity, which indicates that, despite the size and complex architecture of the biopolymer intermediate, the biopolymer does not interfere with antibody binding.

### Table: Binding kinetics of OG1950 and KSI-301 to huVEGF-A165 by SPR or KinExA analysis.

Molecule	Platform (°C)	Kon (M)	K <sub>off</sub> (M)	к <sub>р</sub> (рМ)
OG1950	Biacore(25°)	5.31x10 <sup>6</sup>	4.48x10 <sup>-5</sup>	9.02
	KinExA(37°)	5.09x10 <sup>5</sup>	1.75x10 <sup>-6</sup>	3.43
KSI-301	Biacore(25°)	3.19x10 <sup>6</sup>	5.33x10 <sup>-5</sup>	17.0
	KinExA(37°)	2.69x10 <sup>5</sup>	1.82x10-6	6.75

#### $^{\circ}C = degrees \ Celsius; \ K_D = dissociation \ constant$

We have also tested OG1950 and KSI-301 in vitro alongside other anti-VEGF biologics to test their respective abilities to inhibit VEGF from binding to VEGF receptors. As shown in the figure and table below, while KSI-301 and OG1950 have similar IC50 (the concentration at which binding is reduced by half) compared to EYLEA, KSI-301 consistently demonstrates a higher maximal inhibition than EYLEA or Lucentis. Of note, KSI-301 improved maximal inhibition more than OG1950, suggesting that the special nature of our antibody biopolymer conjugate synergistically improves the bioactivity of the antibody intermediate acting alone.

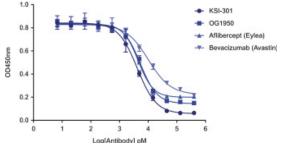


Figure: Inhibition of VEGF binding to VEGF receptors by anti-VEGF agents.

Molecule	IC50 (nM)	Maximal inhibition (%)
KSI-301	3.72±0.74	93.89±1.41
OG1950	3.97±1.19	83.72±3.13
Ranibizumab (Lucentis)	8.60±1.29	70.67±2.36
Aflibercept (EYLEA)	4.50±0.14	74.96±1.84
Bevacizumab (Avastin)	10.29±0.70	73.08±4.20

Table: Average IC<sub>50</sub> and maximal inhibition of anti-VEGF agents. IC<sub>50</sub> values measured in nanomoles (nM) and calculated from concentration of anti-VEGF agents. All values shown as average with standard deviation.

### Inhibition of VEGF-Mediated Processes

Based on its ability to bind and inhibit VEGF, KSI-301 is expected to behave pharmacologically similar to Lucentis, EYLEA and Avastin to decrease the leakage of blood proteins and fluid into the retina. In fact, *in vitro* testing of KSI-301 against Lucentis, EYLEA and Avastin in their respective ability to inhibit VEGF-mediated endothelial cell proliferation (a key component of neovascularization) in primary human retina microvascular endothelial cells, or HRMVECs, showed that KSI-301 inhibited proliferation to approximately the same degree

### **Table of Contents**

2.25 KSI-301 OG1950 2.00 Lucentis 1.75 Eylea Avastin OD 450nm 1.50 1.25 1.00 0.75 0.50 0 2 3 6 log[Antibody] pM

as EYLEA and with greater potency than Lucentis or Avastin. In addition, KSI-301 displayed a superior maximal inhibition of VEGF-mediated proliferation relative to EYLEA and Avastin.

Figure: Effects of KSI-301, Lucentis, EYLEA and Avastin on HRMVEC proliferation.

Molecule	IC <sub>50</sub> (nM)	Maximal Inhibition (%)
KSI-301	0.96±0.18	64.74±2.36
OG1950	$0.85 \pm 0.07$	58.92±5.30
Ranibizumab (Lucentis)	1.25±0.14	60.96±2.53
Aflibercept (EYLEA)	0.74±0.10	53.93±4.91
Bevacizumab (Avastin)	1.25±0.36	38.98±6.18

Table: IC50 Values and maximal inhibition of anti-VEGF agents on VEGF-mediated proliferation of HRMVECs. IC50 values were calculated from concentration of anti-VEGF agents. All values shown as average with standard deviation.

To mimic in vivo conditions where endothelial cells and pericytes coexist in blood vessels, a three-dimensional co-culture of HRMVECs and human mesenchymal pericytes, or HMPs, grown on beads was established. This model was then used to test the ability of KSI-301 to inhibit VEGFmediated vascular sprouting compared to Lucentis and EYLEA. The average number of sprouts per bead and the length per sprout were analyzed under each treatment condition.

As shown in the figures below, at maximal anti-VEGF inhibition the average sprout length of cultures treated with KSI-301 was substantially less than that of the control (481 compared with 990 microns) and comparable to Lucentis and EYLEA (505 and 428 microns respectively). The average number of sprouts per bead for cultures treated with KSI-301 was 11.5, which was comparable to 13.3 and 13.0 sprouts per bead observed for the cultures treated with Lucentis and EYLEA, respectively.

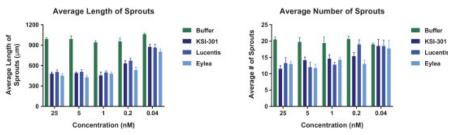


Figure: Effects of KSI-301 and other anti-VEGF molecules on length and number of vascular sprouts in 3-dimensional culture.

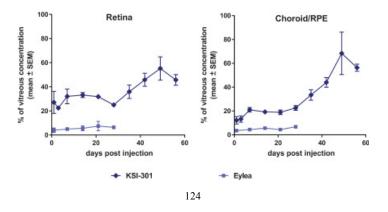
<sup>123</sup> 

## Extended Ocular Half-Life versus Standard of Care Agents

The addition of the biopolymer intermediate increases the size of the biologic, thereby extending the ocular half-life of the molecule beyond that of standard of care anti-VEGF agents. Preclinical studies with KSI-301 in the well-established rabbit ocular pharmacokinetics model have demonstrated that KSI-301 has ocular tissue half-lives of 10+ days in the retina and 12.5+ days in the choroid. This is in comparison to published data for ocular tissue half-lives for Lucentis of 2.9 days and EYLEA of 4-5 days.

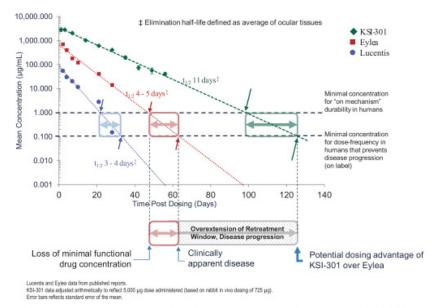
## Enhanced Ocular Tissue Bioavailability versus EYLEA

The data also show that KSI-301, despite its large size, penetrates ocular tissues well and has a retina and choroid ocular tissue biodistribution that is more than four-fold higher than EYLEA.



#### Modeling On-Mechanism Durability and Human Dose Frequency

In order to estimate the impact of high potency and extended ocular half-life on durability of effect, we used a pharmacokinetic and pharmacodynamic model that overlays rabbit ocular tissue pharmacokinetic profiles of intravitreally injected anti-VEGF therapeutics and correlates the drug levels with (1) human OCT data to define a rabbit minimal inhibitory concentration to maintain human on-mechanism durability that corresponds with human OCT outcomes, and (2) human dose frequency to define a rabbit minimal inhibitory concentration to support a dose frequency in humans which corresponds to the ability to maintain visual acuity outcomes over the long-term. Specifically, we overlay the ocular tissue pharmacokinetic profiles of Lucentis at 0.5 mg dose (the marketed dose in wet AMD), EYLEA at 2.0mg dose (the marketed dose), and bioconjugate KSI-301 at 5.0 mg dose (our selected dose), as separately tested.



Our modeling suggests a single dose of KSI-301 can stay above both on-mechanism and "dosing" minimal inhibitory concentrations for longer than 12 weeks. A minimal inhibitory concentration is the minimum concentration of a drug that still has the desired therapeutic effect. The implication is that KSI-301 may on average keep the retina dry for longer than 12 weeks after dosing, allowing patients to be dosed in regular 12-week intervals or less frequently and still maintain anti-VEGF mediated visual acuity gains over the long term. This contrasts with overextending the treatment interval beyond a point where retinal swelling recurs as observed in EYLEA's VIEW 2 Phase 3 clinical trial (as described above).

#### KSI-301 has demonstrated superior stability compared to typical protein therapeutics

Stability studies have shown that KSI-301 bioconjugate is stable in ex vivo vitreous for at least 4 months at 37°C. Further, forced degradation studies at the extreme condition of 64°C have shown that KSI-301 bioconjugate remains in solution and is optically clear for at least 48 hours whereas the precursor antibody protein precipitated forming an opaque white suspension within several hours.

## **Toxicology Profile**

KSI-301 has demonstrated an attractive safety profile in GLP monkey toxicology studies. When dosed bilaterally via intravitreal injection at 2.5 mg or 0.5 mg per eye every four weeks, data to date show KSI-301 is

well tolerated through seven doses. A dose-related anterior segment and posterior segment mild inflammatory response was observed and was not associated with other ocular abnormalities. The anterior segment response declined during the interval between doses and generally the finding was not present one-week post dose. No drug induced systemic toxicity was observed. Additionally KSI-301 was well tolerated up to the highest dose of 5 mg/kg when dosed intravenously every four weeks through ten weeks. To date, we believe this well tolerated profile in monkeys for KSI-301 is more favorable than that reported for Lucentis and EYLEA.

With EYLEA in GLP monkey toxicology studies, EYLEA formulations and, to a lesser extent, vehicle controls typically resulted in a mild anterior segment/vitreous inflammatory response. The severity was usually trace to mild with some occasions of moderate-severe, particularly in the low dose and also at 2 mg/eye and 4 mg/eye. Vitreal cells (generally mild) were observed in the majority of eyes through the dosing phase in all groups including controls. Some instances of moderate-severe were observed, but this was not persistent. At the end of the dosing phase, there was a test article-related increased incidence of epithelial erosion/ulceration often accompanied by chronic-active inflammation of the nasal turbinates in animals given 2 mg/eye and 4 mg/eye.

With Lucentis in GLP monkey toxicology studies, no drug-induced systemic toxicity was observed, but a strong dose-related inflammatory response was observed at all dose levels in all studies. Findings included multifocal perivenous hemorrhages, multifocal perivascular sheathing, inflammatory cell infiltrates (neutrophils, macrophages, plasma cells, lymphocytes, or eosinophils) in various ocular tissues, a cataractogenic effect was noted at dose levels of 1 mg/eye and 2 mg/eye. Fundus photography showed abnormal findings including venous dilatation and tortuosity, venous beading, possible peripapillary retinal thickening, macular thickening, possible papillary swelling, and avascular papillary tufts.

#### **KSI-301** Commercialization

We currently have no sales, marketing or commercial product distribution capabilities and have no experience as a company in marketing products. We intend to build our own commercialization capabilities over time.

If KSI-301 receives marketing approval, we plan to commercialize it in the United States with our own focused, specialty sales force. We believe that retinal specialists in the United States, who perform most of the medical procedures involving diseases of the back of the eye, are sufficiently concentrated that we will be able to effectively promote KSI-301 to these specialists with a sales and marketing group of fewer than 200 persons.

We expect to use a variety of types of collaboration, distribution and other marketing arrangements with one or more third parties to commercialize KSI-301 in markets outside the United States.

## **KSI-301 Manufacturing**

We believe it is important to our business and success to have a reliable, high-quality clinical drug supply. As we mature as a company and approach commercial stage operations, securing reliable high-quality commercial drug supply will be critical.

We do not currently own or operate facilities for product manufacturing, storage, distribution or testing,

We rely on third-party contract manufactures, or CMOs, to manufacture and supply our clinical materials to be used during the development of our product candidates. We have established relationships with several CMOs, including Lonza AG, or Lonza, for the manufacture of KSI-301, as well as certain of our other product candidates.

We currently do not need commercial manufacturing capacity. When and if this becomes relevant, we intend to evaluate both third-party manufacturers as well as building out internal capabilities and capacity. We may choose one or both options, or a combination of the two.

The process for manufacturing KSI-301 consists of conjugating our antibody intermediate with our biopolymer intermediate. Our antibody intermediate is produced in a recombinant GS-CHO (Glutamine Synthetase—Chinese Hamster Ovary) cell line in a protein-free and animal component-free medium. Our biopolymer intermediate is synthesized via a multi-step controlled "living" polymerization process, purified and formulated. Following conjugation of the intermediates, the bioconjugate drug substance is further purified, concentrated, and stored.

To date, we have relied primarily on Lonza for the manufacture of KSI-301, and we believe we have sufficient cGMP drug substance to support our planned Phase 2 clinical development. The manufacture of KSI-301, like other biologic products, is complex and we have actively worked with Lonza to develop and refine our manufacturing process. As our need for KSI-301 increases in connection with future clinical trials and, if approved, commercial quantities, we anticipate continued interaction with Lonza to refine and scale our manufacturing process. Our agreement with Lonza for the manufacture of KSI-301 is effective until 2020, subject to customary termination provisions. We have also identified multiple other CMOs that we believe would be capable of implementing and validating our manufacturing process for KSI-301 should the need arise.

## **ABC Platform**

We believe that our ABC Platform is well suited to extend the durability of soluble, injectable retinal medicines, while at the same providing for other useful benefits. We intend to develop additional drug candidates by applying our ABC Platform in other significant areas of unmet medical need in retina and ophthalmic disease.

We believe our ABC Platform differentiates us and has the potential to fuel a pipeline of differentiated, non-biosimilar product candidates in highprevalence ophthalmic diseases. In addition to KSI-301, we have leveraged our ABC Platform to build a pipeline of potential product candidates, including:

- · KSI-201, a recombinant, mammalian cell expressed dual inhibitor antibody biopolymer bioconjugate, for the treatment of wet AMD;
- · KSI-401, a recombinant, mammalian cell expressed antibody biopolymer conjugate, for the treatment of dry AMD; and
- KSI-501, a recombinant, mammalian cell expressed dual inhibitor antibody biopolymer conjugate, for the treatment of wet AMD and DR.

cGMP master cell banks for both KSI-201 and KSI-401 have been completed, and we continue to evaluate each of the foregoing product candidates in various stages of development.

#### **Overview of KSI-501**

# **Overview of KSI-501**

In addition to angiogenesis, inflammation has been implicated in the pathogenesis of a number of retinal diseases. Anti-inflammatory therapies such as steroids have been effective in treating both uveitis (a spectrum of diseases with intraocular inflammation as a defining characteristic) and DME. Similarly, genetically inherited variations in the interleukin 6, or IL-6, gene have been associated with higher PDR incidence in patients with type 2 diabetes. Moreover, disease progression in AMD, DR and RVO have been reported to be associated with increased serum and/or ocular levels of IL-6. Additionally, chronic inflammatory cells have been seen on the surface of the basement membrane behind the retina in eyes with wet AMD. Interestingly, IL-6 has been implicated in resistance to anti-VEGF treatments in DME patients. This in part is believed to be an indirect result of IL-6 mediated upregulation of VEGF expression as well as more direct VEGF-independent angiogenic functions mediated by IL-6 signaling that occur in the presence of VEGF inhibitors.

Our KSI-501 product candidate is a dual inhibitor Trap-Antibody-Fusion, or TAF, bioconjugate molecule designed to target concurrent inflammation and abnormal angiogenesis observed in the pathogenesis of retinal vascular diseases. KSI-501 acts through an anti-VEGF mechanism similar to EYLEA and an anti-inflammatory mechanism that targets the potent cytokine IL-6. Similar to KSI-301, KSI-501 uses the ABC Platform and is a bioconjugate of the TAF protein conjugated to our phosphorylcholine-based biopolymer. Preclinical binding and functional studies demonstrate that the TAF protein binds specifically and simultaneously to its intended targets. We believe that this dual inhibition may provide a superior treatment option for patients with retinal vascular diseases and in particular those patients with diseases known to have a high inflammatory component such as DME, as well as in ocular inflammatory diseases such as uveitis.

# **Components of KSI-501**

KSI-501 is a bioconjugate of a dual inhibitor TAF protein and a phosphorylcholine-based biopolymer. The protein portion of KSI-501 has two VEGF binding domains from human VEGF receptors which together act as a trap or soluble receptor decoy to bind the most abundant isoforms of VEGF. The anti-VEGF trap domains are fused to a high-affinity IgG1 antibody that binds with high specificity and affinity to IL-6 and disrupts the ligand's association with its cognate IL-6 receptor. Moreover, the Fc domain has been engineered to reduce immune effector function and facilitate site-specific conjugation to our phosphorylcholine-based biopolymer.

Notably, this IgG1 antibody sequence is identical to that from KSI-301, except for the six CDR regions that mediate target binding and which are specific for binding to the IL-6 target. Retaining the IgG1 frameworks across ABC Platform-derived product candidates enables "platform capability" which simplify manufacturing and product development. KSI-501, furthermore, uses the same cGMP biopolymer intermediate as KSI-301.



Figure: Functional structure of the KSI-501 antibody biopolymer conjugate. CH – constant heavy, CL – constant light, VH – variable heavy, VL – variable light, – Complementarity Determining Regions (CDR).

### Characteristics of KSI-501

٠

We believe that KSI-501 can be a highly differentiated treatment due to its dual mechanism of action, with an improved durability and bioavailability profile due to the ABC Platform component. In addition, there are currently no IL-6 inhibitors approved for use in the eye.

We incorporated the following design features into KSI-501:

- · Binds with high affinity to the most abundant isoforms of VEGF
- Engineered to remove a protease hotspot to prevent cleavage in Chinese Hamster Ovary, or CHO, mammalian expression systems, which may improve potency and formulation stability

Design Feature: KSI-501's anti-IL-6 domain

- Affinity matured, humanized anti-IL-6 IgG1 that binds with high affinity to IL-6 and inhibits binding of IL-6 to its cognate receptor
- IgG1 Fc domain engineered to reduce immune effector functions

Design Feature: KSI-501's phosphorylcholine-based ABC Platform

- Ultra-high molecular weight of 1,000,000 Daltons for improved ocular pharmacokinetics
- Same IgG1 framework sequences and same phosphorylcholine-based biopolymer as KSI-301 and other ABC Platform-derived product candidates to simplify manufacturing and product development
- Other benefits of the ABC Platform such as enhanced tissue access to key ocular tissues and bioconjugate stability

*Note that the in vitro data shown below are generated using the TAF (protein) of KSI-501, without conjugation to our ABC biopolymer.* Results using KSI-501 may be different, but experience with a structurally

similar prior molecule, KSI-201, has shown that these individual components, i.e. trap antibody fusion protein and biopolymer, can function together simultaneously as a dual inhibitor bioconjugate. Prior experiences with bioconjugates KSI-201 and KSI-301 have also demonstrated that the biopolymer portion does not interfere with the bioactivity of the protein portion.

## Affinity and concurrent binding to VEGF and IL-6

Preclinical studies indicate that the TAF portion of KSI-501 binds with high affinity to both VEGF and IL-6, as measured by SPR analysis (Table). Importantly, binding of each molecule has no effect on the binding of the other, and KSI-501 can bind to both molecules as shown below. Thus, we believe our dual inhibitor can simultaneously inhibit both of its targets with high potency.

## Table: Binding kinetics of TAF portion of KSI-501 to huVEGF-A165 or IL-6 by SPR analysis.

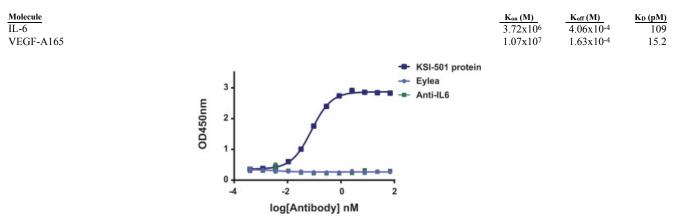


Figure: TAF of KSI-501 simultaneously binds to IL-6 and VEGF by sandwich ELISA, which only shows a signal if a compound binds to both IL-6 and VEGF concurrently.

## Inhibition of VEGF and IL-6

KSI-501 was designed to inhibit both VEGF and IL-6 mediated signaling that occur after the ligands bind to their respective receptors. The figure below shows that the TAF protein of KSI-501 effectively prevents VEGF from stimulating downstream VEGFR2 signaling in a reporter assay in a comparable manner to EYLEA, while anti-IL-6 alone served as a negative control.

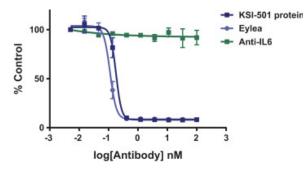
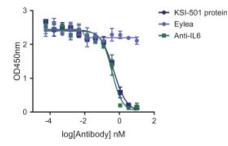


Figure: VEGF stimulated reporter assay with increasing concentrations of anti-VEGF inhibitors

The figure below shows that the control anti-IL-6 antibody and TAF protein of KSI-501 effectively compete with IL-6R for binding to platebound IL-6 and therefore inhibit this specific antigen-receptor interaction. The



IC50 values for the control anti-IL-6 monoclonal antibody and the TAF protein are comparable (anti-IL-6 = 0.36 nM, KSI-501 = 0.47 nM), while EYLEA had no effect.

Figure: ELISA measuring IL-6 binding to IL-6R in the presence of increasing concentrations of anti-IL-6 inhibitors

Together, these data indicate that the TAF protein of KSI-501 inhibits both VEGF and IL-6 from binding their cognate receptors as effectively as the monotherapies. Importantly, these data also demonstrate that the TAF protein of KSI-501 can simultaneously block downstream signaling mediated by both VEGF and IL-6.

## IL-6 and VEGF mediated proliferation of HUVECs

The ability of the TAF protein of KSI-501 to inhibit IL-6 and VEGF mediated angiogenic functions was tested in a Human Vascular Endothelial Cell, or HUVEC, proliferation assay as shown in the figure below. Importantly, the concentrations of VEGF and IL-6 used to stimulate proliferation were below the saturation point for each individual stimulant and under these conditions VEGF and IL-6 showed some synergy for growth. The presence of TAF protein significantly attenuated proliferation to approximately 50% of maximal growth, while neither EYLEA nor control anti-IL-6 alone had quantifiable effects. These data provide supporting evidence that KSI-501 can synergistically abrogate endothelial cell proliferation that is driven by concurrent inflammatory and VEGF mediated signaling.

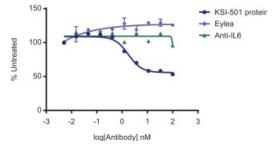


Figure: VEGF/IL-6 mediated HUVEC proliferation in the presence of inhibitors

#### IL-6 and VEGF mediated tubule formation of HUVECs:

TAF protein of KSI-501 was also tested in an endothelial cell tubule formation assay. Treatment of HUVECs seeded on an extracellular basement membrane matrix (Matrigel) with VEGF and IL-6 together stimulate tubule formation to a higher degree than either treatment alone. The TAF protein of KSI-501 demonstrated superior inhibition of this tubule formation when compared to EYLEA or control anti-IL-6 antibody.

Furthermore, quantification of the effects of each inhibitor on twenty parameters of HUVEC tubule formation show that the TAF protein significantly inhibited 17 of 20 angiogenic parameters versus control (compared to 4 of 20 for EYLEA and 7 of 20 for control anti-IL-6 antibody). TAF protein was statistically better than EYLEA and anti-IL-6 control in 12 of 20 parameters.

130

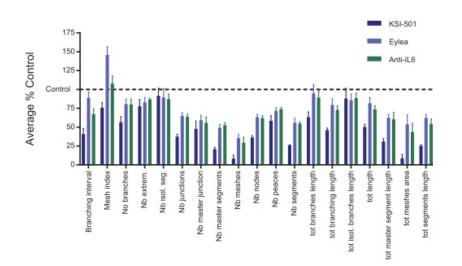


Figure: Quantification of IL-6/VEGF mediated HUVEC tubule formation in the presence or absence of inhibitor molecules using the Angiogenesis Analyzer plugin for ImageJ

Together, these data show that the TAF protein of KSI-501 can simultaneously bind IL-6 and VEGF to inhibit their downstream angiogenic signaling pathways. We believe that this novel dual inhibitor can provide an alternative option for the treatment of retinal vascular diseases, especially those that have a high inflammatory component and/or that do not respond adequately to anti-VEGF treatments alone.

## **Research and Development**

We have committed, and expect to continue to commit, significant resources to enhancing our ABC Platform and developing new product candidates. We have assembled experienced research and development teams at our Palo Alto, California location with scientific, clinical and regulatory personnel. As of September 1, 2018, we had 23 employees primarily engaged in research and development. Of these employees, 12 hold a Ph.D. degree or M.D. (or equivalent) degree. From time to time we engage individuals to assist with certain research and development activities on a contractual basis for limited time periods. Our research and development expenses for the years ended December 31, 2016 and 2017 were \$14.1 million and \$22.0 million, respectively.

#### 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 potential 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 potential competitors include large pharmaceutical and biotechnology companies, and specialty pharmaceutical and generic or biosimilar drug companies. Many of our competitors have significantly greater financial and human resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors compete with us in recruiting and retaining

qualified scientific and management personnel, establishing clinical trial sites and patient enrollment for clinical trials, as well as in acquiring products, product candidates or other technologies complementary to our programs.

The key competitive factors affecting the success of KSI-301, if approved, are likely to be its efficacy, safety, method and frequency of administration, on-mechanism durability of therapeutic effect, convenience, price, the level of generic competition and the availability of coverage and reimbursement from government and other third-party payors. The method of administration of KSI-301, intravitreal injection, is commonly used to administer ophthalmic drugs for the treatment of severe disease and is generally accepted by patients facing the prospect of severe visual loss or blindness. However, a therapy that offers a less invasive method of administration might have a competitive advantage over one administered by intravitreal injection, depending on the relative safety of the other method of administration.

The current standard of care for wet AMD and advanced stages of DR is monotherapy administration of anti-VEGF drugs, principally Avastin, Lucentis and EYLEA, which are well-established therapies and are widely accepted by physicians, patients and third-party payors. Physicians, patients and third-party payors may not accept the addition of KSI-301 to their current treatment regimens for a variety of potential reasons, including:

- if they do not wish to incur the additional cost of KSI-301;
- if they perceive the addition of KSI-301 to be of limited benefit to patients;
- · if they wish to treat with more than an anti-VEGF drug;
- if sufficient coverage and reimbursement are not available;
- if they do not perceive KSI-301 to have a favorable risk-benefit profile.

We are developing KSI-301 as an alternative to existing anti-VEGF drugs, including Avastin, Lucentis and EYLEA. Accordingly, KSI-301 would directly compete with these therapies. While we believe KSI-301 will compete favorably with existing anti-VEGF drugs, future approved standalone or combination therapies for wet AMD with demonstrated improved efficacy over KSI-301 or currently marketed therapies with a favorable safety profile and any of the following characteristics might pose a significant competitive threat to us:

- · a mechanism of action that does not involve VEGF;
- a duration of action that obviates the need for frequent intravitreal injection;
- · a method of administration that avoids intravitreal injection; and
- significant cost savings or reimbursement advantages compared to KSI-301 and other anti-VEGF therapies.

Our commercial opportunity could be reduced or eliminated if one or more of 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. A drug with greater convenience than KSI-301 might make such a drug more attractive to physicians and patients. An anti-VEGF gene therapy product might substantially reduce the number and frequency of intravitreal injections when treating wet AMD or DR, making KSI-301 unattractive to physicians and patients. 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 because in many cases insurers or other third-party payors seek to encourage the use of generic products.

In addition to currently available therapies, we are aware of a number of products in preclinical research and clinical development by third parties to treat wet AMD and DR. We expect that product candidates currently in clinical development, or that could enter clinical development in the near future, that inhibit the function of VEGF or inhibit the function of both VEGF and other factors, could represent significant competition if approved. These product candidates may provide efficacy, safety, convenience and other benefits that are not provided by currently marketed therapies. For example, we are aware that Novartis is developing brolucizumab, an anti-VEGF single-chain antibody fragment for the treatment of wet AMD, which recently completed two Phase 3 studies versus EYLEA. In these trials, brolucizumab met the primary efficacy endpoint of noninferiority to EYLEA in mean change in best-corrected visual acuity from baseline to week 48. In addition, Allergan is developing a competing anti-VEGF therapy, abicipar, which

is part of a new class of drugs called DARPin therapies that uses genetically modified antibody proteins. Positive topline data from Allergan's Phase 3 studies for abicipar in wet AMD were recently reported with a 15% incidence rate of ocular inflammation, and full data are expected to be presented in 2018. There are also several companies and research organizations pursuing treatments targeting other molecular targets, potential gene therapy treatments, stem cell transplant treatments and medical devices for the treatment of wet AMD and DR.

Because there are a variety of means to treat wet AMD and DR, our patents and other proprietary protections for KSI-301 will not prevent development or commercialization of product candidates that are different from KSI-301.

#### **Government Regulation**

Government authorities in the United States at the federal, state and local level and in other countries regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and biological products. Generally, before a new drug or biologic can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific for each regulatory authority, submitted for review and approved by the regulatory authority.

### U.S. Drug Development

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations, and biologics under the FDCA, the Public Health Service Act, or PHSA, and their implementing regulations. Both drugs and biologics also are subject to other federal, state and local statutes and 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. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or post-market may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Any future product candidates must be approved by the FDA through either a new drug application, or NDA, or a biologics license application, or BLA, process before they may be legally marketed in the United States. The process generally involves the following:

- completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with good laboratory practice, or GLP, requirements;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, or ethics committee at each clinical trial site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, good clinical practice, or GCP, requirements and other clinical trial-related regulations to establish the safety and efficacy of the investigational product for each proposed indication;
- submission to the FDA of an NDA or BLA;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to accept the filing for review;
- satisfactory completion of a FDA pre-approval inspection of the manufacturing facility or facilities where the drug or biologic will be produced to assess compliance with current good manufacturing practices, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug or biologic's identity, strength, quality and purity;

- potential FDA audit of the preclinical and/or clinical trial sites that generated the data in support of the NDA or BLA;
- FDA review and approval of the NDA or BLA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug or biologic in the United States; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

The data required to support an NDA or BLA are generated in two distinct developmental stages: preclinical and clinical. The preclinical and clinical testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for any future product candidates will be granted on a timely basis, or at all.

## Preclinical Studies and IND

The preclinical developmental stage generally involves laboratory evaluations of drug chemistry, formulation and stability, as well as studies to evaluate toxicity in animals, which support subsequent clinical testing. The sponsor must submit the results of the preclinical studies, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin.

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as in vitro and animal studies to assess the potential for adverse events and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations for safety/toxicology studies. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical studies, among other things, 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. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time, the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

### **Clinical Trials**

The clinical stage of development involves the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent amendments to the protocol, must be submitted to the FDA as part of the IND. Furthermore, each clinical trial must be reviewed and approved by an IRB for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative, and must monitor the clinical trial until completed. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries.

A sponsor who wishes to conduct a clinical trial outside of the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA or BLA. The FDA will accept a well-designed and well-conducted foreign clinical study not conducted under an IND if the study was

conducted in accordance with GCP requirements and the FDA is able to validate the data through an onsite inspection if deemed necessary.

- Clinical trials in the United States generally are conducted in three sequential phases, known as Phase 1, Phase 2 and Phase 3, and may overlap.
  - Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, side effect tolerability and safety of the drug.
  - Phase 2 clinical trials involve studies in disease-affected patients to determine the dose required to produce the desired benefits. At the same
    time, safety and further pharmacokinetic and pharmacodynamic information is collected, possible adverse effects and safety risks are identified
    and a preliminary evaluation of efficacy is conducted.
- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product approval. These trials may include comparisons with placebo and/or other comparator treatments. The duration of treatment is often extended to mimic the actual use of a product during marketing.

Post-approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA or BLA.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the drug, findings from animal or in vitro testing that suggest a significant risk for human subjects and any clinically important increase in the rate 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, if at all. 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 or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug or biologic has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check points based on access to certain data from the trial. Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the drug or biologic 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 product and, among other things, companies 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 our product candidates do not undergo unacceptable deterioration over their shelf life.

#### NDA/BLA Review Process

Following completion of the clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA or BLA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. In short, the NDA or BLA is a request for approval to market the drug or biologic for one or more specified indications and must contain proof of safety and efficacy for a

drug or safety, purity and potency for a biologic. The application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of FDA. FDA approval of an NDA or BLA must be obtained before a drug or biologic may be marketed in the United States.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA or BLA must be accompanied by a user fee. FDA adjusts the PDUFA user fees on an annual basis. According to the FDA's fee schedule, effective through September 30, 2018, the user fee for an application requiring clinical data, such as an NDA or BLA, is \$2,421,495. PDUFA also imposes an annual product fee for human drugs and biologics (approximately \$97,750) and an annual establishment fee (approximately \$512,200) on facilities used to manufacture prescription drugs and biologics. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs or BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews all submitted NDAs and BLAs before it accepts them for filing, and may request additional information rather than accepting the NDA or BLA for filing. The FDA must make a decision on accepting an NDA or BLA for filing within 60 days of receipt. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA or BLA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA has ten months, from the filing date, in which to complete its initial review of a new molecular-entity NDA or original BLA and respond to the applicant, and six months from the filing date of a new molecular-entity NDA or original BLA designated for priority review. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs or BLAs, and the review process is often extended by FDA requests for additional information or clarification.

Before approving an NDA or BLA, the FDA will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product 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. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. Additionally, the FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will reanalyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. After the FDA evaluates an NDA or BLA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA or BLA identified by the FDA. The Complete Response Letter may require additional clinical data, additional pivotal Phase 3 clinical trial(s) and/or other significant and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA or BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data.

#### **Expedited Development and Review Programs**

The FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs and biologics that meet certain criteria. Specifically, new drugs and biologics are eligible for fast track designation if they are intended to treat a serious or life threatening condition and preclinical or clinical data

demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to both the product and the specific indication for which it is being studied. The sponsor can request the FDA to designate the product for fast track status any time before receiving NDA or BLA approval, but ideally no later than the pre-NDA or pre-BLA meeting.

Any product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it treats a serious or life-threatening condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies.

A product may also be eligible for accelerated approval, if it treats a serious or life-threatening condition and generally provides a meaningful advantage over available therapies. In addition, it must demonstrate an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit. As a condition of approval, the FDA may require that a sponsor of a drug or biologic receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. If the FDA concludes that a drug or biologic shown to be effective can be safely used only if distribution or use is restricted, it may require such post-marketing restrictions, as it deems necessary to assure safe use of the product.

Additionally, a drug or biologic may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints. The benefits of breakthrough therapy designation include the same benefits as fast track designation, plus intensive guidance from the FDA to ensure an efficient drug development program. Fast track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval, but may expedite the development or approval process.

## Abbreviated Licensure Pathway of Biological Products as Biosimilar or Interchangeable

The Patient Protection and Affordable Care Act, or PPACA, or Affordable Care Act, or ACA, signed into law in 2010, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, created an abbreviated approval pathway for biological products shown to be highly similar to an FDA-licensed reference biological product. The BPCIA attempts to minimize duplicative testing, and thereby lower development costs and increase patient access to affordable treatments. An application for licensure of a biosimilar product must include information demonstrating biosimilarity based upon the following, unless the FDA determines otherwise:

- analytical studies demonstrating that the proposed biosimilar product is highly similar to the approved product notwithstanding minor differences in clinically inactive components;
- · animal studies (including the assessment of toxicity); and
- a clinical study or studies (including the assessment of immunogenicity and pharmacokinetics or pharmacodynamics) sufficient to demonstrate safety, purity and potency in one or more conditions for which the reference product is licensed and intended to be used.

In addition, an application must include information demonstrating that:

- the proposed biosimilar product and reference product utilize the same mechanism of action for the condition(s) of use prescribed, recommended, or suggested in the proposed labeling, but only to the extent the mechanism(s) of action are known for the reference product;
- the condition or conditions of use prescribed, recommended, or suggested in the labeling for the proposed biosimilar product have been
  previously approved for the reference product;
- the route of administration, the dosage form, and the strength of the proposed biosimilar product are the same as those for the reference product; and

• the facility in which the biological product is manufactured, processed, packed or held meets standards designed to assure that the biological product continues to be safe, pure, and potent.

Biosimilarity means that the biological product is highly similar to the reference product notwithstanding minor differences in clinically inactive components; and that there are no clinically meaningful differences between the biological product and the reference product in terms of the safety, purity, and potency of the product. In addition, the law provides for a designation of "interchangeability" between the reference and biosimilar products, whereby the biosimilar may be substituted for the reference product without the intervention of the health care provider who prescribed the reference product. The higher standard of interchangeability must be demonstrated by information sufficient to show that:

- · the proposed product is biosimilar to the reference product;
- the proposed product is expected to produce the same clinical result as the reference product in any given patient; and
- for a product that is administered more than once to an individual, the risk to the patient in terms of safety or diminished efficacy of alternating or switching between the biosimilar and the reference product is no greater than the risk of using the reference product without such alternation or switch.

FDA approval is required before a biosimilar may be marketed in the United States. However, complexities associated with the large and intricate structures of biological products and the process by which such products are manufactured pose significant hurdles to the FDA's implementation of the law that are still being worked out by the FDA. For example, the FDA has discretion over the kind and amount of scientific evidence—laboratory, preclinical and/or clinical—required to demonstrate biosimilarity to a licensed biological product.

The FDA intends to consider the totality of the evidence, provided by a sponsor to support a demonstration of biosimilarity, and recommends that sponsors use a stepwise approach in the development of their biosimilar products. Biosimilar product applications thus may not be required to duplicate the entirety of preclinical and clinical testing used to establish the underlying safety and effectiveness of the reference product. However, the FDA may refuse to approve a biosimilar application if there is insufficient information to show that the active ingredients are the same or to demonstrate that any impurities or differences in active ingredients do not affect the safety, purity or potency of the biosimilar product. In addition, as with BLAs, biosimilar product applications will not be approved unless the product is manufactured in facilities designed to assure and preserve the biological product's safety, purity and potency.

The submission of a biosimilar application does not guarantee that the FDA will accept the application for filing and review, as the FDA may refuse to accept applications that it finds are insufficiently complete. The FDA will treat a biosimilar application or supplement as incomplete if, among other reasons, any applicable user fees assessed under the Biosimilar User Fee Act of 2012 have not been paid. In addition, the FDA may accept an application for filing but deny approval on the basis that the sponsor has not demonstrated biosimilarity, in which case the sponsor may choose to conduct further analytical, preclinical or clinical studies and submit a BLA for licensure as a new biological product.

The timing of final FDA approval of a biosimilar for commercial distribution depends on a variety of factors, including whether the manufacturer of the branded product is entitled to one or more statutory exclusivity periods, during which time the FDA is prohibited from approving any products that are biosimilar to the branded product. The FDA cannot approve a biosimilar application for twelve years from the date of first licensure of the reference product. Additionally, a biosimilar product sponsor may not submit an application for four years from the date of first licensure of the reference product. A reference product may also be entitled to exclusivity under other statutory provisions. For example, a reference product designated for a rare disease or condition (an "orphan drug") may be entitled to seven years of exclusivity, in which case no product that is biosimilar to the reference product may be approved until either the end of the twelve-year period provided under the biosimilarity statute or the end of the seven-year orphan drug exclusivity period, whichever occurs later. In certain circumstances, a regulatory exclusivity period can extend beyond the life of a patent, and thus block biosimilarity applications from being approved on or after the patent expiration date. In addition, the FDA may under certain circumstances extend the exclusivity period

for the reference product by an additional six months if the FDA requests, and the manufacturer undertakes, studies on the effect of its product in children, a so-called pediatric extension.

The first biological product determined to be interchangeable with a branded product for any condition of use is also entitled to a period of exclusivity, during which time the FDA may not determine that another product is interchangeable with the reference product for any condition of use. This exclusivity period extends until the earlier of: (1) one year after the first commercial marketing of the first interchangeable product; (2) 18 months after resolution of a patent infringement against the applicant that submitted the application for the first interchangeable product, based on a final court decision regarding all of the patents in the litigation or dismissal of the litigation with or without prejudice; (3) 42 months after approval of the first interchangeable product, if a patent infringement suit against the applicant that submitted the application for the first interchangeable product is still ongoing; or (4) 18 months after approval of the first interchangeable product if the applicant that submitted the applicant that submitted the applicant of the first interchangeable product is still ongoing; or (4) 18 months after approval of the first interchangeable product if the applicant that submitted the application for the first interchangeable product as not been sued.

#### **Post-Approval Requirements**

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping requirements, requirements to report adverse experiences, and comply with promotion and advertising requirements, which include restrictions on promoting drugs for unapproved uses or patient populations (known as "off-label use") and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such uses. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use. Further, if there are any modifications to the drug or biologic, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA/BLA or NDA/BLA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for a Risk Evaluation and Mitigation Strategy, or REMS, to assure the safe use of the product. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

The FDA may withdraw 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 studies to assess new safety risks; or imposition of distribution restrictions 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 studies;
- refusal of the FDA to approve pending applications or supplements to approved applications;
- · applications, 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 and biologics 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.

#### Other U.S. Regulatory Matters

Manufacturing, sales, promotion and other activities following product approval are also subject to regulation by numerous regulatory authorities in the United States in addition to the FDA, including the Centers for Medicare & Medicaid Services, other divisions of the Department of Health and Human Services, the Department of Justice, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency and state and local governments.

For example, in the United States, sales, marketing and scientific and educational programs also must comply with state and federal fraud and abuse laws. These laws include the federal Anti-Kickback Statute, which makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration that is intended to induce or reward referrals, including the purchase, recommendation, order or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. Violations of this law are punishable by up to five years in prison, criminal fines, administrative civil money penalties and exclusion from participation in federal healthcare programs. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Pricing and rebate programs must comply with the Medicaid rebate requirements of the U.S. Omnibus Budget Reconciliation Act of 1990 and more recent requirements in the ACA. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. Manufacturing, sales, promotion and other activities also are potentially subject to federal and state consumer protection and unfair competition laws.

The distribution of biologic and pharmaceutical products is subject to additional requirements and regulations, including extensive recordkeeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The failure to comply with any of these laws or regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals or refusal to allow a firm to enter into supply contracts, including government contracts. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Prohibitions or restrictions on sales or withdrawal of future products marketed by us could materially affect our business in an adverse way.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (1) changes to our manufacturing arrangements; (2) additions or modifications to product labeling; (3) the recall or discontinuation of our products; or (4) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

#### U.S. Patent-Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of any future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits restoration of the patent term of up to five years as compensation for patent term lost during product development and FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent-term restoration period is

generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA or BLA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a fiveyear period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of a NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for a NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and wellcontrolled clinical trials necessary to demonstrate safety and effectiveness.

A reference biological product is granted twelve years of data exclusivity from the time of first licensure of the product, and the FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product. "First licensure" typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a subplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product includes a modification to the structure of a previously licensed product that results in a change in safety, purity, or potency. Therefore, one must determine whether a new product includes a modification to the structure of a first licensure of the licensure of the licensure of the licensure of the set of a previously licensed product that results in a change in safety, purity, whether a subsequent application, if approved, warrants exclusivity as the "first licensure" of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

### **European Union Drug Development**

As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the member state regimes. Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU countries where the trial is to be conducted by

two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

The EU clinical trials legislation currently is undergoing a transition process mainly aimed at harmonizing and streamlining clinical-trial authorization, simplifying adverse-event reporting procedures, improving the supervision of clinical trials and increasing their transparency. Recently enacted Clinical Trials Regulation EU No 536/2014 ensures that the rules for conducting clinical trials in the EU will be identical. In the meantime, Clinical Trials Directive 2001/20/EC continues to govern all clinical trials performed in the EU.

## European Union Drug Review and Approval

In the European Economic Area, or EEA, which is comprised of the 27 Member States of the European Union (including Norway and excluding Croatia), Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations.

- The Community MA is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the European Medicines Agency, or EMA, and is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced-therapy medicines such as gene-therapy, somatic cell-therapy or tissue-engineered medicines and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.
- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member States through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State, or RMS. The competent authority of the RMS prepares a draft assessment report, a draft summary of the product characteristics, or SPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, labeling, or packaging proposed by the RMS, the product is subsequently granted a national MA in all the Member States (i.e., in the RMS and the Member States Concerned).

Under the above described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

#### People's Republic of China Drug Regulation

China heavily regulates the development, approval, manufacturing and distribution of drugs, including biologics. The specific regulatory requirements applicable depend on whether the drug is made and finished in China, which is referred to as a domestically manufactured drug, or made abroad and imported into China in finished form, which is referred to as an imported drug, as well as the approval or "registration" category of the drug. For both imported and domestically manufactured drugs, China typically requires regulatory approval for a clinical trial, or CTA, prior to submitting an application for marketing approval. For a domestically manufactured drug, there is also a requirement for a drug manufacturing license for a facility in China.

In 2017, the drug regulatory system entered a new and significant period of reform. The State Council and the China Communist Party jointly issued the Opinion on Deepening the Reform of the Regulatory Approval System to Encourage Innovation in Drugs and Medical Devices, or the Innovation Opinion. The expedited programs and other advantages under this and other recent reforms encourage drug manufacturers to seek market approval in China first, manufacture domestically, and develop drugs in high priority disease areas.

To implement the regulatory reform introduced by the Innovation Opinion, the China Drug Authority, or CDA, is currently revising the fundamental laws, regulations and rules regulating pharmaceutical products and the industry, which include the framework law known as the PRC Drug Administration Law, or DAL. The DAL is also generally implemented by a set of regulations issued by the State Council referred to as the DAL Implementing Regulation. The CDA has its own set of regulations implementing the DAL; the primary one governing clinical trial applications, marketing approval, and license renewal and amendment is known as the Drug Registration Regulation. However, the implementing regulations for many of the reforms in the Innovation Opinion had not been announced, and therefore, the details in the implementation of the regulatory changes remained uncertain in some respects.

### Regulatory Authorities and Recent Government Reorganization

In the PRC, the CDA is the primary regulator for pharmaceutical products and businesses. It regulates almost all of the key stages of the life-cycle of pharmaceutical products, including nonclinical studies, clinical trials, marketing approvals, manufacturing, advertising and promotion, distribution, and pharmacovigilance (i.e., post-marketing safety reporting obligations). The Center for Drug Evaluation, or CDE, which is under the CDA, conducts the technical evaluation of each drug and biologic application for safety and effectiveness.

The National Health and Family Planning Commission, or NHFPC, formerly known as the Ministry of Health, or MOH, is China's chief healthcare regulator. It is primarily responsible for overseeing the operation of medical institutions, which also serve as clinical trial sites, and regulating the licensure of hospitals and other medical personnel. NHFPC plays a significant role in drug reimbursement. Furthermore, the NHFPC and its local counterparts at or below the provincial-level of local government also oversee and organize public medical institutions' centralized bidding and procurement process for pharmaceutical products. This is the chief way that public hospitals and their internal pharmacies acquire drugs.

China has recently reorganized the agencies that regulate drugs, healthcare, and the state health insurance plans, although it is still not entirely clear what effect on policy these changes will ultimately have in terms of making the drug approval process more efficient. The drug regulatory agency, CFDA, is merged into a State Administration on Market Regulation, or SAMR, along with other agencies that regulate consumer protection, product quality and anti-monopoly. The drug, device and cosmetic regulatory functions of CFDA is put under the CDA, which is subordinate to the SAMR. The National Health Commission, or the NHC, will be the healthcare regulator replacing the NHFPC, and a new, separate State Medical Insurance Bureau will focus on regulating reimbursement under the state-sponsored insurance plans.

### Pre-Clinical and Clinical Development

The CDA requires both pre-clinical and clinical data to support registration applications for imported and domestic drugs. Pre-clinical work, including pharmacology and toxicology studies, must meet the GLP, issued in July 2017. The CDA accredits GLP labs and requires that nonclinical studies on chemical drug substances and preparations and biologics that are not yet marketed in China be conducted there. There are no approvals required from the CDA to conduct pre-clinical studies.

### Registration Categories

Prior to engaging with the CDA on research and development and approval, an applicant will need to determine the registration category for its drug candidate (which will ultimately need to be confirmed with the CDA), which will determine the requirements for its clinical trial and marketing application. There are five categories for small molecule drugs: Category 1 ("innovative drugs") refers to drugs that have a new chemical entity that has not been marketed anywhere in the world, Category 2 ("improved new drugs") refers to drugs with

a new indication, dosage form, route of administration, combination, or certain formulation changes not approved in the world, Categories 3 and 4 are for generics that reference an innovator drug (or certain well-known generic drugs) marketed either abroad or in China, respectively, and Category 5 refers to originator or generic drugs that have already been marketed abroad but are not yet approved in China (*i.e.*, many imported drugs).

Therapeutic biologics follow a similar categorization, with Category 1 being new to the world, but with fifteen product-specific categories. Like with small molecule drugs, Category 1 for biologics is also for innovative biologics that have not been approved inside or outside of China. A clear regulatory pathway for biosimilars does not yet exist, but the CDA may soon develop one in its revision of implementing rules pursuant to the Innovation Opinion. We have not yet discussed with the CDA the categorization of any of our product candidates, including KSI-301.

# Expedited Programs - Priority Evaluation and Approval Programs to Encourage Innovation

The CDA has adopted several expedited review and approval mechanisms since 2009 and created additional expedited programs in recent years that are intended to encourage innovation. Applications for these expedited programs can be submitted after the CTA is admitted for review by the CDE. If admitted to one of these expedited programs, an applicant will be entitled to more frequent and timely communication with reviewers at the CDE, expedited review and approval, and more agency resources throughout the approval process.

### Clinical Trials and Marketing Approval

Upon completion of pre-clinical studies, a sponsor typically needs to conduct clinical trials in China for registering a new drug in China. The materials required for this application and the data requirements are determined by the registration category. The CDA has taken a number of steps to increase efficiency for approving CTAs, and it has also significantly increased monitoring and enforcement of GCP to ensure data integrity.

### Trial Approval

All clinical trials conducted in China must be approved and conducted at hospitals accredited by the CDA. For imported drugs, proof of foreign approval is required prior to the trial, unless the drug has never been approved anywhere in the world. In addition to a standalone China trial to support development, imported drug applicants may establish a site in China that is part of an international multicenter trial, or IMCT, at the outset of the global trial. Domestically manufactured drugs are not subject to foreign approval requirements, and in contrast to prior practice, the CDA has recently indicated its intent to permit those drugs to conduct development via an IMCT as well.

In 2015, the CDA began to issue an umbrella approval for all phases (typically three) of a new drug clinical trial, instead of issuing approval phase by phase. For certain types of new drug candidates, clinical trial applications may be prioritized over other applications, and put in a separate expedited queue for approval. Other trials that are not part of these expedited lines could still wait up to a year for approval to conduct the trial.

The Innovation Opinion also introduces a notification system for new drug clinical trial approval. In other words, trials can proceed if after certain fixed period of time (possibly 60 days), the applicant has not received any objections from the CDE, as opposed to the lengthier current clinical trial pre-approval process in which the applicant must wait for affirmative approval. The Innovation Opinion also promises to expand the number of trial sites by truncating the timeline for accreditation by converting it from a pre-approval procedure into a notification procedure. These reforms will require implementing law and regulations in order to proceed in practice. The CDA proposed implementing legislation in 2017 but it has not yet been finalized.

### Clinical Trial Process and Good Clinical Practices

Typically drug clinical trials in China have three phases. Phase 1 refers to the initial clinical pharmacology and human safety evaluation studies. Phase 2 refers to the preliminary evaluation of a drug candidate's therapeutic efficacy and safety for target indication(s) in patients. Phase 3 (often the pivotal study) refers to clinical trials to further verify the drug candidate's therapeutic efficacy and safety on patients with target

indication(s) and ultimately provide sufficient evidence for the review of drug registration application. The CDA requires that the different phases of clinical trials in China receive ethics committee approval prior to approval of the CTA and comply with GCP. The CDA conducts inspections to assess GCP compliance and will cancel the CTA if it finds substantial issues.

The CDA may reduce requirements for trials and data, depending on the drug and the existing data. The CDA has granted waivers for all or part of trials, but it is now planning to take a more official position on the acceptance of foreign data to support an application. The foreign data must meet the CDA's requirements, including, for drugs that have never been approved before in China, having sufficient Chinese ethnic data. The precise requirements are not yet clear.

# New Drug Application (NDA) and Approval

Upon completion of clinical trials, a sponsor may submit clinical trial data to support marketing approval for the drug. For imported drugs, this means issuance of an import license. Again, the applicant must submit evidence of foreign approval, unless it is an innovative drug that has never been approved anywhere in the world.

Domestically manufactured drugs must similarly submit data in support of a drug approval number. Under the current regime, upon approval of the registration application, the CDA will first issue a new drug certificate to the applicant. Only when the applicant is equipped with relevant manufacturing capability will the CDA issue a Drug Approval Serial Number, which is effectively the marketing approval allowing the holder to market/commercialize the drug in China.

Under the authorization of the Standing Committee of the National People's Congress, the State Council issued the Pilot Plan for the Drug Marketing Authorization Holder Mechanism on May 26, 2016, which provides a detailed pilot plan for the marketing authorization holder system, or MAH pilot program. Domestically established research institutions (including domestic companies) can apply through an MAH pilot program if they are established in one of 10 designated provinces (including Beijing and Shanghai) in China. The MAH pilot program permits research institutions and individuals to develop and hold the marketing approvals for drugs without holding a drug manufacturing license. The marketing authorization holders, or MAHs, may engage contract manufacturers and distributors.

The MAH pilot program is set to run until November 2018. The Innovation Opinion indicates that China will strive to implement the MAH system nationally as soon as possible by amending the DAL. The CDA has proposed revisions to accomplish this purpose, but the timeline to finalize these proposals is still unclear.

### New Drug Monitoring Period

Currently, new varieties of domestically produced drugs approved under Categories 1 or 2 in China may be placed under a monitoring period for three to five years. Category 1 innovative drugs will be monitored for five years. During the monitoring period, the CDA will not approve another CTA from another applicant for the same type of drug, except if another sponsor has an approved CTA at the time that the monitoring period is initiated it may proceed with its trial and become part of the period. Therefore, by blocking other CTAs, the monitoring period can act as a type of market exclusivity.

### Acceptance of Foreign Clinical Trial Studies

On July 10, 2018, the CDA issued the Technical Guidance Principles on Accepting Foreign Drug Clinical Trial Data, or the Guidance Principles, as one of the implementing rules for the Innovation Opinion. According to the Guidance Principles, sponsors may use the data of foreign clinical trials to support drug registration in China, provided that sponsors must ensure the authenticity, completeness and accuracy of foreign clinical trial data and such data must be obtained consistent with the relevant requirements under the Good Clinical Trial Practice (GCP) of the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). Sponsors must also comply with other relevant sections of the Drug Registration Regulation when applying for drug registrations in China using foreign clinical trial data.

### Post-Marketing Surveillance

The manufacturer or marketing authorization holder of marketing approval is primarily responsible for pharmacovigilance, including quality assurance, adverse reaction reporting and monitoring, and product recalls. Distributors and user entities (e.g., hospitals) are also required to report, in their respective roles, adverse reactions of the products they sell or use, and assist with the manufacturer of the product recall. A drug that is currently under the new drug monitoring period has to report all adverse drug reactions (as opposed to just serious adverse reactions) for that period.

# Advertising and Promotion of Pharmaceutical Products

China has a strict regime for the advertising of approved medicines. No unapproved medicines may be advertised. The definition of an advertisement is very broad, and does not exclude scientific exchange. It can be any media that directly or indirectly introduces the product to end users. There is no clear line between advertising and any other type of promotion.

#### Other PRC national- and provincial-level laws and regulations

We are subject to changing regulations under many other laws and regulations administered by governmental authorities at the national, provincial and municipal levels, some of which are or may become applicable to our business. For example, regulations control the confidentiality of patients' medical information and the circumstances under which patient medical information may be released for inclusion in our databases, or released by us to third parties. The privacy of human subjects in clinical trials is also protected under regulations, e.g., the case report forms must avoid disclosing names of the human subjects.

These laws and regulations governing both the disclosure and the use of confidential patient medical information may become more restrictive in the future, including restrictions on transfer of healthcare data. The Cybersecurity Law that took effect in 2017 designates healthcare as a priority area that is part of critical information infrastructure, and China's cyberspace administration is trying to finalize a draft rule on cross-border transfer of personal information.

# Coverage and Reimbursement

Sales of our products will depend, in part, on the extent to which our products will be covered by third-party payors, such as government health programs, commercial insurance and managed healthcare organizations. In the United States no uniform policy of coverage and reimbursement for drug or biological products exists. Accordingly, decisions regarding the extent of coverage and amount of reimbursement to be provided for any of our products will be made on a payor-by-payor basis. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained.

The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price-controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. For example, the ACA contains provisions that may reduce the profitability of drug products through increased rebates for drugs reimbursed by Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Adoption of general controls and measures, could with the tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceutical drugs.

The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of the Department of Health and Human Services as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. The ACA made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded

prescription drugs from 15.1% of average manufacturer price, or AMP, to 23.1% of AMP and adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, as well as potentially impacting their rebate liability by modifying the statutory definition of AMP. The ACA also expanded the universe of Medicaid utilization subject to drug rebates by requiring pharmaceutical manufacturers to pay rebates on Medicaid managed care utilization and by enlarging the population potentially eligible for Medicaid drug benefits. The Centers for Medicaid Services, or CMS, have proposed to expand Medicaid rebate liability to the territories of the United States as well.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, established the Medicare Part D program to provide a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Unlike Medicare Part A and B, Part D coverage is not standardized. While all Medicare drug plans must give at least a standard level of coverage set by Medicare, Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drug may lincrease demand for products for which we receive marketing approval. However, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

For a drug product to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the AMP and Medicaid rebate amounts reported by the manufacturer. As of 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although, under the current state of the law, with the exception of children's hospitals, these newly eligible entities will not be eligible to receive discounted 340B pricing on orphan drugs. In addition, as 340B drug prices are determined based on AMP and Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase.

As noted above, the marketability of any products for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. An increasing emphasis on cost containment measures in the United States has increased and we expect will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

In addition, in most foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally prices tend to be significantly lower.

# **Intellectual Property**

We strive to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to our business, including seeking, maintaining, and defending patent rights. We seek to protect our proprietary position by, among other methods, filing patent applications in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements, and product candidates that are important to the development and implementation of our business. We also rely on trade secrets and know-how relating to our proprietary technology and product candidates and continuing innovation to develop, strengthen, and maintain our proprietary position in the field. Although we are not party to any material in-license agreements as of the date of this prospectus, we may in the future pursue in-licensing opportunities to strengthen our proprietary position in the field. We additionally rely on data exclusivity, market exclusivity, and patent term extensions when available, and may seek and rely on regulatory protection afforded through orphan drug designations. Our commercial success may depend in part on our ability to obtain and maintain patent and other proprietary protection for our technology, inventions, and improvements; to preserve the confidentiality of our trade secrets; to defend and enforce our proprietary rights, including our patents; and to operate without infringing the valid and enforceable patents and other proprietary rights of third parties.

We have prosecuted numerous patents and patent applications and possess know-how and trade secrets relating to the development and commercialization of our ABC Platform and product candidates, including related manufacturing processes and technology. As of August 30, 2018, we were the assignee of record for approximately three U.S. issued patents, and approximately nine U.S. pending patent applications directed to certain of our proprietary technology, inventions, and improvements and our most advanced product candidates, as well as approximately 12 patents issued in jurisdictions outside of the United States and approximately 51 patent applications pending in jurisdictions outside of the United States that, in many cases, are counterparts to the foregoing U.S. patents and patent applications. We also have one pending PCT application. For example, these patents and patent applications include claims directed to:

- therapeutic proteins and biologically active agents conjugated to a biopolymer, which comprise our ABC Platform;
- · specific therapeutics, including KSI-301; and
- components of our therapeutics.

The following patents and patent applications (including anticipated 20 year expiration dates, which could be altered by, for example, a disclaimer, patent term adjustment or patent term extension) relate to KSI-301 and/or ABC Platform:

Patent and Patent Application Numbers US 8,846,021, US Appl. No. 14/456,875, EP Patent No. 1988910, JP Patent No. 5528710, JP Patent No. 5745009, and foreign applications in certain jurisdictions claiming priority to PCT/US2007/005372	Anticipated U.S. Expiration Date 2/28/2027	Description of Representative U.S. Claims Representative claims include conjugates
US Appl. No. 15/368,376, AU Patent No. 2011239434, and foreign applications in certain jurisdictions claiming priority to PCT/US2011/032768	4/15/2031	Representative claims include conjugates
US 8,765,432, US Appl. No. 15/099,234, AU Patent No. 2010330727, EP Patent No. 2512462, CN Patent No. ZL201080062252.7, JP Patent No. 5760007, JP Patent No. 5990629, MX Patent No. 346423, KR Patent No. 10- 1852044, MO Patent No. J/002943, and foreign applications in certain jurisdictions claiming priority to PCT/US2010/061358	5/10/2030	Representative claims include copolymers and methods of making copolymers (ABC Platform specifically)
US Appl. No. 14/916,180 and foreign applications in certain jurisdictions claiming priority to PCT/US2014/054622	9/8/2034	Representative claims include polymers and method of making polymers
US Appl. No. 15/394500 and foreign applications in certain jurisdictions claiming priority to PCT/US2016/069336	12/29/2036	Representative claims include antibody and antibody conjugate claims, as well as methods of making and using the conjugates.

In the normal course of business, we intend to pursue, when possible, composition, method of use, dosing and formulation patent protection, as well as manufacturing and drug development processes and technology. The patents and patent applications we have filed outside of the United States are in Europe, Japan, and various other jurisdictions.

Individual patents extend for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance, and the legal term of patents in the countries in which they are obtained. Generally, patents issued for applications filed in the United States are effective for 20 years from the earliest effective filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period. The restoration period cannot be longer than five years and the total patent term, including the restoration period, must not exceed 14 years following FDA approval. The duration of patents outside of the United States varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date.

Our issued U.S. patents will expire on dates ranging from 2027 to 2035. If patents are issued on our pending patent applications, the resulting patents are projected to expire on dates ranging from 2027 to 2038. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent.

We have filed 18 trademark applications. These include two applications that have matured to registration in the United States, one of which has been cancelled. Ten of our applications have matured to registration, of which six are in China, and one is in each of the European Union, Japan, Singapore and Switzerland. We have six pending trademark applications, of which five are in the United States and one is in Canada. We also may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets are difficult to protect. We seek to protect our technology and product candidates, in part, by entering into confidentiality agreements with those who have access to our confidential information, including our employees, contractors, consultants, collaborators, and advisors. We also seek to preserve the integrity and confidentiality of our proprietary technology and processes by maintaining physical security of our premises and physical and electronic security of our information technology systems. Although we have confidence in these individuals, organizations, and systems, agreements or security measures may be breached and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or may be independently discovered by competitors. To the extent that our employees, contractors, consultants, collaborators, and advisors use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. For this and more comprehensive risks related to our proprietary technology, inventions, improvements and products, please see the section on "Risk Factors—Risks Related to Intellectual Property."

We are also a party to an assignment and license agreement with a former collaborator, whereby we were assigned and non-exclusively licensed certain intellectual property relating to KSI-201 and related technology. Under this agreement, we agreed to use commercially reasonable efforts to develop, obtain regulatory approval for and commercialize KSI-201, and will owe milestone payments to our former collaborator upon the achievement of certain milestones related to KSI-201, as well as a low single digit percentage royalty on net sales of KSI-201. The assignment and license agreement includes customary termination provisions, including the right of the company to terminate for convenience and the right of either party to terminate for cause.

### Employees

As of September 1, 2018, we had 28 employees, all of whom were full-time and around 23 of whom were engaged in research and development activities. Approximately 12 of our employees hold Ph.D. or M.D. degrees. Substantially all our employees are located in Palo Alto, California. None of our employees is represented by a labor union or covered under a collective bargaining agreement.

#### Facilities

Our corporate headquarters are located in Palo Alto, California, where we lease approximately 11,000 square feet of office, research and development, engineering and laboratory space pursuant to a lease agreement which commenced in October 2013 and would expire in October 2018. In March 2016, we executed a third lease amendment agreement that became effective March 31, 2016 and extended the lease term until October 31, 2023. This facility houses all our personnel. We believe that our existing facilities are adequate for our near-term needs but expect to need additional space as we grow. We believe that suitable additional or alternative space would be available as required in the future on commercially reasonable terms.

#### Legal Proceedings

As of the date of this prospectus, we are not a party to any material legal proceedings. In the normal course of business, we may be named as a party to various legal claims, actions and complaints. We cannot predict whether any resulting liability would have a material adverse effect on our financial position, results of operations or cash flows.

# MANAGEMENT

# **Executive Officers and Directors**

The following table sets forth the names, ages and positions of our executive officers and directors as of October 3, 2018:

Name	Age	Position
Executive Officers		
Victor Perlroth, M.D.	45	Chief Executive Officer, President and Chairman of the Board
Jason Ehrlich, M.D., Ph.D.	42	Chief Medical Officer and Chief Development Officer
John A. Borgeson	57	Senior Vice President and Chief Financial Officer
Hong Liang, Ph.D.	46	Senior Vice President, Discovery Medicine
Non-Employee Directors		
Felix J. Baker, Ph.D. <sup>(2)(3)</sup>	49	Director
Bassil I. Dahiyat, Ph.D. (1)(2)(3)	47	Director
Richard S. Levy, M.D. <sup>(1)(3)</sup>	61	Director
Robert A. Profusek <sup>(2)(3)</sup>	68	Director

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

### **Executive Officers**

*Victor Perlroth, M.D.* co-founded Kodiak Sciences in 2009 and is our Chairman and Chief Executive Officer. Previously, Dr. Perlroth served as Venture Partner and then Entrepreneur in Residence at MPM Capital, a dedicated healthcare venture capital investment firm. In 2003, Dr. Perlroth co-founded Avidia Inc., a biopharmaceuticals drug discovery and development company which was acquired by Amgen Inc., where he served as General Manager and Vice President of Corporate Development. In this role, at various times he had broad management responsibility across both corporate and research and development activities. Previously, Dr. Perlroth worked at Guzik Technical Enterprises, an industry-leading provider of test equipment to the hard disk drive industry, where he was Chief Operating Officer. Dr. Perlroth earned his M.D. and M.B.A. degrees from Stanford University and an A.B. in Molecular Biology *summa cum laude* from Princeton University.

We believe Dr. Perlroth's years of management experience in the pharmaceutical industry as well as his extensive understanding of our business, operations, and strategy qualify him to serve on our board of directors.

Jason Ehrlich, M.D., Ph.D. joined Kodiak as our Chief Medical Officer and Chief Development Officer in September 2018. Dr. Ehrlich, an ophthalmologist, is passionate about improving outcomes for patients with vision-threatening eye diseases through the development of innovative medicines. He is internationally recognized for his leadership and expertise in ophthalmic drug development. Prior to joining Kodiak, Dr. Ehrlich served in an executive capacity as Global Head, Clinical Ophthalmology at Genentech, a member of the Roche Group of pharmaceutical companies. In roles of increasing responsibility at Genentech and Roche from July 2008 to August 2018, Dr. Ehrlich's efforts as lead clinician for Lucentis in diabetic eye disease resulted in a unanimous FDA Advisory Committee vote and the first-ever FDA approval of an intraocular drug for diabetic macular edema; he then championed further expanding the Lucentis labeling into all forms of diabetic retinopathy, resulting in another first-ever FDA approval. Dr. Ehrlich guided the integration of the ophthalmic drug delivery company ForSIGHT VISION4 into Genentech/Roche after its acquisition, including oversight of the successful Phase II study of the ranibizumab Port Delivery System. In his work, Dr. Ehrlich has participated in or overseen numerous supplemental biologics license applications and both FDA and European health authority interactions. He led the global development of lampalizumab, including design and execution of the pivotal Phase III program that included over 1,800 patients, over 275 sites, and more than 20 countries. He also

oversaw his team's effort to secure FDA approvals of Lucentis in its prefilled syringe and for choroidal neovascularization due to pathologic myopia, and the successful transition to global Phase III development of RO6867461, a novel bispecific antibody for retinal vascular disease. Dr. Ehrlich completed his Ophthalmology residency at Stanford University School of Medicine, earned his M.D. and Ph.D. degrees from Stanford through the NIH-funded Medical Scientist Training Program, and received his A.B. in Molecular Biology *summa cum laude* from Princeton University.

*John A. Borgeson* is our Senior Vice President and Chief Financial Officer and has served in this position since January 2016. Mr. Borgeson brings over 25 years of pharmaceutical industry experience in finance, strategy and operations on a global scale. From January 2013 until December 2015, Mr. Borgeson led finance for a variety of private biotech companies, including Labrys Biologics, Inc., which was acquired by Teva Pharmaceuticals. Previously, Mr. Borgeson was a Vice President of Finance at Pfizer Inc. and a member of Pfizer's Global Finance and Business Operations Leadership Team. Mr. Borgeson's roles at Pfizer included finance head for Pfizer's biotherapeutics and bioinnovation group and corporate tax executive with responsibility for the United States and Europe. Mr. Borgeson started his career as an auditor with Ernst & Young and is a certified public accountant (inactive). He has an M.B.A. from R.I.T. and an undergraduate degree from the School of Management at the University at Buffalo (S.U.N.Y.).

Hong Liang, Ph.D. is our Senior Vice President, Discovery Medicine and has served in this position since December 2015. Dr. Liang has 20 years of experience in research and development in protein therapeutics. Prior to joining Kodiak, Dr. Liang worked at the Rinat Laboratory of Pfizer Inc. in roles with increasing levels of responsibility from August 2009 to December 2015, most recently as Senior Director, focusing on antibody biologics design and discovery through Phase 3 clinical development as well the application of translational biomarkers to drug development. Dr. Liang trained as a postdoctoral fellow at Stanford University, earned a Ph.D. degree at Northwestern University, and completed requirements in Biology at the University of Science and Technology of China.

## **Board of Directors**

*Felix J. Baker, Ph.D.* has served as one of our directors since September 2015 and as chair of our compensation committee and a member of our nominating and corporate governance committee since September 2018. Dr. Baker is Co-Managing Member of Baker Bros. Advisors LP. Dr. Baker and his brother, Julian Baker, started their fund management careers in 1994 when they co-founded a biotechnology investing partnership with the Tisch Family. In 2000, they founded Baker Bros. Advisors LP. Dr. Baker currently also serves on the boards of directors of three public companies: Seattle Genetics, Inc., Genomic Health, Inc. and Alexion Pharmaceuticals, Inc. From October 2000 to June 2015, Dr. Baker additionally served on the board of directors of Synageva BioPharma Corp. Dr. Baker holds a B.S. and a Ph.D. in Immunology from Stanford University, where he also completed two years of medical school.

We believe Dr. Baker's experience as a board member and investor in many successful biotechnology companies qualify him to serve on our board of directors.

*Bassil I. Dahiyat, Ph.D.* has served as a member of our board of directors since June 2018 and as chair of our audit committee and a member of our compensation committee and nominating and corporate governance committee since September 2018. Dr. Dahiyat has served as President and Chief Executive Officer of Xencor, Inc., a biopharmaceutical company, since February 2005. Dr. Dahiyat co-founded Xencor in 1997, served as its Chief Executive Officer from 1997 to 2003 and served as its Chief Scientific Officer from 2003 to 2005. In 2005, Dr. Dahiyat was recognized as a technology pioneer by the World Economic Forum. Additionally, Dr. Dahiyat was named one of 2003's Top 100 Young Innovators by MIT's Technology Review magazine for his work on protein design and its development for therapeutic applications and has received awards from the American Chemical Society, the Controlled Release Society and the California Institute of Technology. Dr. Dahiyat currently serves on Xencor's board of directors. Dr. Dahiyat holds a Ph.D. in Chemistry from the California Institute of Technology and B.S. and M.S.E. degrees in Biomedical Engineering from Johns Hopkins University.

We believe Dr. Dahiyat's significant experience in the pharmaceutical industry and executive management experience qualify him to serve on our board of directors.

*Richard S. Levy, M.D.* has served as a member of our board of directors since June 2018 and a member of our audit committee and nominating and corporate governance committee since September 2018. Since December 2016, Dr. Levy has served as a senior advisor of Baker Bros. Advisors LP, a registered investment advisor focused on long-term investments in life sciences companies on behalf of major university endowments and foundations. From January 2009 to April 2016, Dr. Levy served as Executive Vice President and Chief Drug Development Officer of Incyte Corporation, a pharmaceutical company, where he previously served as Senior Vice President of Drug Development from August 2003 to January 2009. Prior to joining Incyte, Dr. Levy served as Vice President, Biologic Therapies, at Celgene Corporation, a biopharmaceutical company, from 2002 to 2003. From 1997 to 2002, Dr. Levy served as Vice President, Medical and Commercial Strategy. Dr. Levy served at Sandoz, a predecessor company of Novartis, from 1991 to 1997 in positions of increasing responsibility in clinical research and regulatory affairs. Prior to joining the pharmaceutical industry, Dr. Levy served as an Assistant Professor of Medicine at the UCLA School of Medicine. Dr. Levy currently serves on the board of directors of Madigal Pharmaceuticals Inc. and of Aquinox Pharmaceuticals. Dr. Levy is board certified in Internal Medicine and Gastroenterology and received his A.B. in Biology from Brown University, his M.D. from the University of Pennsylvania School of Medicine, and completed his training in Internal Medicine and Gastroenterology at the Hospital of the University of Pennsylvania and a fellowship in Gastroenterology and Hepatology at UCLA.

We believe Dr. Levy's significant experience in the pharmaceutical industry and medical training qualify him to serve on our board of directors.

*Robert A. Profusek* has served as one of our directors since June 2018, as our lead independent director since August 2018 and as chair of our nominating and corporate governance committee and a member of our compensation committee since September 2018. Mr. Profusek is a partner of the Jones Day law firm where he is the global chair of the firm's mergers and acquisitions practice. His law practice focuses on mergers, acquisitions, takeovers, restructurings and corporate governance matters. Mr. Profusek is also the lead independent director of Valero Energy Corporation, a publicly traded international manufacturer and marketer of transportation fuels and other petrochemical products, and CTS Corporation, a publicly traded designer and manufacturer of sensors, actuators and electronic components. He served as a director of the managing general partner of Valero L.P. (now known as NuStar Energy L.P.) from 2001 to 2005. Mr. Profusek holds a B.A. from Cornell University and a J.D. from New York University.

We believe Mr. Profusek is qualified to serve as a board member because of his expertise in legal matters, including corporate governance; capital markets expertise attained through his extensive experience in mergers and acquisitions and financing activities; managerial experience attained through his leadership roles with Jones Day; and the knowledge and experience he has attained through his service as a director of other public companies.

### **Board Composition and Risk Oversight**

Our board of directors is currently composed of five members. Each of our directors other than Dr. Perlroth is independent within the meaning of the independent director guidelines of the Nasdaq Global Market. All of the directors other than Dr. Perlroth were initially elected to our board of directors pursuant to a voting agreement that will terminate automatically by its terms upon the completion of this offering. Our certificate of incorporation and bylaws to be in effect upon the completion of this offering provide that the number of our directors shall be at least one and will be fixed from time to time by resolution of our board of directors. There are no family relationships among any of our directors or executive officers.

Immediately prior to the completion of this offering, our board of directors will be divided into three classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the class whose terms are then expiring. The terms of the directors will expire upon the election and qualification of successor directors at the annual meeting of stockholders to be held during the years 2019 for the Class I directors, 2020 for the Class II directors.

· Our Class I directors will be Dr. Levy and Mr. Profusek.

- · Our Class II director will be Dr. Dahiyat.
- · Our Class III directors will be Drs. Perlroth and Baker.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control. See the section of this prospectus titled "Description of Capital Stock—Anti-Takeover Effects of Delaware and Our Certificate of Incorporation and Bylaws" for a discussion of other anti-takeover provisions found in our certificate of incorporation.

Our board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. The board of directors is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks and operational risks. Our compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. Our audit committee is responsible for overseeing the management of our risks relating to accounting matters and financial reporting. Our nominating and corporate governance committee is responsible for overseeing the management of our risks associated with the independence of our board of directors and potential conflicts of interest. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, our entire board of directors is regularly informed through discussions from committee members about such risks. Our board of directors believes its administration of its risk oversight function has not affected the board of directors' leadership structure.

### **Director Independence**

Our common stock has been approved for listing on the Nasdaq Global Market. Under the rules of the Nasdaq Global Market, independent directors must comprise a majority of a listed company's board of directors within a specified period of the completion of this offering. In addition, the rules of the Nasdaq Global Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. Under the rules of the Nasdaq Global Market, a director will only qualify as an "independent director" if, in the opinion of that 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.

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 capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In August 2018, our board of directors undertook a review of its composition, the composition of its committees and the independence of our directors and considered whether any director has a material relationship with us that could compromise his ability to exercise independent judgment in carrying out his or her responsibilities. 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, other than Dr. Perlroth, none of our directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of the Nasdaq Global Market. In September 2018, our board of directors also determined that Dr. Dahiyat and Dr. Levy, who comprise our audit committee; Dr. Baker, Mr. Profusek, and Dr. Dahiyat, who comprise our compensation committee; and Mr. Profusek, Dr. Baker, Dr. Levy, and Dr. Dahiyat, who comprise our nominating and corporate governance committee, satisfy the independence standards for those committees established by applicable SEC rules and the rules of the Nasdaq Global Market. In making this determination, our board of directors considered the relationships that each non-employee director has with us and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

### **Board Leadership Structure**

Dr. Perlroth, our chief executive officer, is also the chairman of our board of directors. Our board of directors determined that having our chief executive officer also serve as the chairman of our board of directors provides us with optimally effective leadership and is in our best interests and those of our stockholders. Dr. Perlroth co-founded our company, and our board of directors believes that Dr. Perlroth's years of management experience in the pharmaceutical industry as well as his extensive understanding of our business, operations, and strategy make him well qualified to serve as chairman of our board.

In August 2018, our board of directors appointed Mr. Profusek to serve as our lead independent director. As lead independent director, Mr. Profusek will preside over periodic meetings of our independent directors, serve as a liaison between the chairman of our board of directors and the independent directors and perform such additional duties as our board of directors may otherwise determine and delegate.

### **Board Committees**

Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and the responsibilities described below.

### Audit Committee

The members of our audit committee are Dr. Dahiyat and Dr. Levy, each of whom is a non-employee member of our board of directors. Our audit committee chairman, Dr. Dahiyat, is our audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act of 2002, and possesses financial sophistication, as defined under the rules of the Nasdaq Global Market. Our audit committee oversees our corporate accounting and financial reporting process and assists our board of directors in monitoring our financial systems. Our audit committee operates under a written charter that specifies its duties and responsibilities and satisfies the applicable listing standards of the Nasdaq Global Market. Our board of directors has determined that each of Dr. Dahiyat and Dr. Levy is independent for audit committee purposes, as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and have sufficient knowledge in financial and auditing matters to serve on the audit committee. We intend to rely on the phase-in provisions of Rule 10A-3 of the Exchange Act and the Nasdaq transition rules applicable to companies completing an initial public offering, and we plan to have an audit committee comprised entirely of at least three directors that are independent for purposes of serving on an audit committee within one year after our listing.

Our audit committee will:

- · approve the hiring, discharging and compensation of our independent registered public accounting firm;
- · oversee the work of our independent registered public accounting firm;
- · approve engagements of the independent registered public accounting firm to render any audit or permissible non-audit services;
- · review the qualifications, independence and performance of the independent registered public accounting firm;
- · review our consolidated financial statements and review our critical accounting policies and estimates;
- · review the adequacy and effectiveness of our internal controls; and
- review and discuss with management and the independent registered public accounting firm the results of our annual audit, our quarterly
  consolidated financial statements and our publicly filed reports.

# **Compensation Committee**

The members of our compensation committee are Dr. Baker, Mr. Profusek and Dr. Dahiyat. Dr. Baker is the chairman of our compensation committee. Our compensation committee oversees our compensation policies,

plans and benefits programs. Our compensation committee operates under a written charter that specifies its duties and responsibilities and satisfies the applicable listing standards of the Nasdaq Global Market. The compensation committee will:

- · review and recommend policies relating to compensation and benefits of our officers and employees;
- · review and approve corporate goals and objectives relevant to compensation of our chief executive officer and other senior officers;
- · evaluate the performance of our officers in light of established goals and objectives;
- · recommend compensation of our officers based on its evaluations; and
- · administer the issuance of stock options and other awards under our stock plans.

#### Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Mr. Profusek, Dr. Baker, Dr. Levy and Dr Dahiyat. Mr. Profusek is the chairman of our nominating and corporate governance committee. Our nominating and corporate governance committee oversees and assists our board of directors in reviewing and recommending nominees for election as directors. Our nominating and corporate governance committee operates under a written charter that specifies its duties and responsibilities and satisfies the applicable listing standards of the Nasdaq Global Market. The nominating and corporate governance committee will:

- · evaluate and make recommendations regarding the organization and governance of the board of directors and its committees;
- assess the performance of members of the board of directors and make recommendations regarding committee and chair assignments;
- · recommend desired qualifications for board of directors membership and conduct searches for potential members of the board of directors; and
- · review and make recommendations with regard to our corporate governance guidelines.

Our board of directors may from time to time establish other committees.

### **Director Compensation**

For the year ended December 31, 2017, neither of Drs. Perlroth nor Baker, our two directors then serving, received compensation or reimbursement in connection with their service on our board of directors and Dr. Baker did not hold any option awards at December 31, 2017.

In September 2018, we adopted an Outside Director Compensation Policy, effective on the date of effectiveness of the registration statement of which this prospectus forms a part. This Outside Director Compensation Policy was developed, with input from our independent compensation consultant firm, Compensia, Inc., or Compensia, regarding practices and compensation level at comparable companies. It is designed to attract, retain, and reward non-employee directors.

## **Cash Compensation**

Under the Outside Director Compensation Policy, our non-employee directors will be eligible to receive annual cash compensation for service on our board of directors and committees of our board of directors as follows subject to the limits in our 2018 Equity Incentive Plan:

- \$40,000 for service as an outside director;
- \$30,000 for service as non-executive chairperson of the board of directors;
- \$24,000 for service as lead independent director;

- \$20,000 for service as chairperson of the audit committee;
- \$9,000 for service as a member of the audit committee;
- \$13,000 for service as chairperson of the compensation committee;
- \$6,500 for service as a member of the compensation committee;
- \$9,000 for service as chairperson of the nominating and corporate governance committee; and
- \$5,000 for service as a member of the nominating and corporate governance committee.

All cash payments to non-employee directors will be paid quarterly in arrears on a prorated basis.

### **Equity Compensation**

*Initial Options.* Subject to the limits in our 2018 Equity Incentive Plan, each person who first becomes a non-employee director (other than a person that ceases to be an employee of ours but remains a director of ours) on or following the effective date of the outside director compensation policy will be granted an initial option to purchase shares of our common stock with a grant date value of approximately \$400,000, which grant will be effective on the first trading date on or after the date on which such person first becomes a non-employee director on or following the effective date of the outside directors to fill a vacancy. Each initial option will vest as to 1/3rd of the shares subject to the initial option on the one-year anniversary of the date of grant and as to 1/36th of the shares subject to the initial option each month thereafter, in each case, subject to continued service through each applicable vesting date.

Annual Options. Subject to the limits in our 2018 Equity Incentive Plan, each non-employee director will be automatically granted, on the date of each annual meeting of our stockholders following the effective date of the outside director compensation policy, an annual option to purchase shares of our common stock with a grant date value of approximately \$150,000. Each annual option will fully vest on the earlier of (1) the one-year anniversary of the date of grant of the annual option or (2) the day prior to the date of the next annual meeting of our stockholders that occurs following the grant of such annual option, in each case, subject to continued service through the applicable vesting date.

In the event of a change in control, and unless otherwise agreed, each non-employee director will fully vest in his or her outstanding equity awards, including any initial option or annual option, provided that he or she continues to be a non-employee director through such date.

We also will continue to reimburse our outside directors for reasonable, customary and documented travel expenses incurred in connection with attending board and board committee meetings.

In connection with their joining our board of directors in 2018, each of our non-employee directors (other than Dr. Baker) was granted an option to purchase 50,000 shares of our common stock with an exercise price of \$5.38 per share. Each of these options vests as to 1/3rd of the shares subject to the option on the one-year anniversary of the vesting start date and as to 1/36th of the shares subject to the option each month thereafter, in each case, subject to continued service through each applicable vesting date. In determining the size and terms of these awards, our board of directors considered such factors as it determined appropriate, including, the market data and recommendations provided by Compensia, the compensation level of non-employee directors at comparable companies, the expected timing of the issuance of future equity awards to them under the Outside Director Compensation Policy, and the expected future contributions of these non-employee directors to our company.

# **Code of Business Conduct and Ethics**

In August 2018, we adopted 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. The code of business conduct and ethics became effective on the date of effectiveness of the registration statement of which this prospectus forms a part. Following this offering, a copy of the code will be posted on the investor section of our website.

### **Compensation Committee Interlocks and Insider Participation**

The members of our compensation committee are Dr. Baker, Mr. Profusek and Dr. Dahiyat. None of the members of our compensation committee is an officer or employee of our company. None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on our board of directors or compensation committee. See the section of this prospectus titled "Certain Relationships and Related Party Transactions" for additional information.

### Limitation of Liability and Indemnification Matters

Our certificate of incorporation and bylaws provide for the indemnification of our directors and officers to the fullest extent permitted under the Delaware General Corporation Law. In addition, our certificate of incorporation provides that our directors shall not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director and that if the Delaware General Corporation Law is amended to authorize corporate action further limiting the personal liability of directors, then the liability of our directors shall be limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

As permitted by the Delaware General Corporation Law, we have entered into separate indemnification agreements with each of our directors and certain of our officers that require us, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors or officers. We maintain insurance policies under which our directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities that might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not we would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

We believe that these provisions and agreements are necessary to attract and retain qualified persons as our officers and directors. At present, there is no pending litigation or proceeding involving our directors or officers for whom indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

# EXECUTIVE COMPENSATION

# **Summary Compensation Table**

The following table provides information regarding the compensation of our named executive officers.

Name and Principal Position Victor Perlroth, M.D.	Year 2017	<u>Salary</u> \$387,600	Bonus	Option Awards <sup>(1)</sup>	All Other Compensation \$ 141,285 <sup>(2)</sup>	Total \$528,885
Chairman and Chief Executive Officer John Borgeson	2017	297,250	_	_	_	297,250
Senior Vice President and Chief Financial Officer Hong Liang, Ph.D. Senior Vice President, Discovery Medicine	2017	254,584	\$46,125	\$ 21,200	_	321,909

(1) The amounts included in the "Option Awards" column represent the aggregate grant date fair value of option awards calculated in accordance with FASB ASC Topic 718, using the Black-Scholes option pricing model. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. See Note 2 of the notes to our consolidated financial statements included elsewhere in this prospectus for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options.

(2) Represents additional amounts paid to Dr. Perlroth relating to his temporary assignment to Kodiak Sciences GmbH from February 20, 2017 to July 14, 2017 and consists of (a) \$72,622 in storage and insurance of household goods, educational expenses, international cellular charges and travel reimbursements; and (b) \$68,663 of Swiss income tax reimbursement and U.S. income tax gross-ups in respect of the foregoing benefits.

#### **Outstanding Equity Awards at December 31, 2017**

The following table shows grants of stock options and stock awards to each of our named executive officers outstanding at December 31, 2017.

	Option Awards					Stock Awards	
Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Exercise Prices (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares of Units of Stock That Have Not Vested (\$) <sup>(5)</sup>
Victor Perlroth, M.D.	9/8/2015	168,750	131,250(1)(2)(3)	1.04	6/24/2026		
	9/8/2015	_	_	_	_	23,767 <sup>(2)(3)</sup>	\$ 237,670
	1/1/2015	_	_		_	211,426 <sup>(2)(3)</sup>	2,114,260
	1/1/2014	_	_		_	625 <sup>(2)(3)</sup>	6,250
John Borgeson	1/1/2016	42,460	46,154 <sup>(1)(2)(3)</sup>	1.04	6/24/2026	_	_
	1/1/2016	_		_	_	46,154 <sup>(2)(3)</sup>	461,540
	6/1/2014	_			_	9,661(2)(3)	96,610
Hong Liang, Ph.D.	4/15/2017	3,333	16,667 <sup>(2)(3)</sup>	1.06	5/16/2027	—	_
	12/7/2015	66,000	66,000 <sup>(3)(4)</sup>	1.04	6/24/2026	_	_

(1) Subject to an early exercise right and may be exercised in full prior to vesting of the shares underlying such option.

(2) Vests over four years in equal monthly installments, subject to continued service the applicable vesting date.

(3) Vesting is subject to the vesting acceleration provisions set forth in the named executive officer's employment agreement. See "Executive Employment Arrangements" below for more information on vesting acceleration.

(4) Vests as to 25% of the shares on the first anniversary of the vesting commencement date, with the remainder vesting in equal monthly installments over the following 36 months, subject to continued service through the applicable vesting date.

(5) The market value of our common stock is based on the initial public offering price of our common stock of \$10.00 per share.

<sup>159</sup> 

# 2018 Executive Officer Equity Awards

In April 2018, our executive officers were granted the following options to purchase shares of our common stock: (1) an option covering 600,000 shares to Dr. Perlroth, (2) an option covering 200,000 shares to Mr. Borgeson, and (3) an option covering 100,000 shares to Dr. Liang. Each option has an exercise price of \$5.38 per share and vests as to 1/48th of the shares subject to the option each month after the vesting start date, in each case, subject to continued service through each applicable vesting date. In determining the size and terms of these option grants, our board of directors considered such factors as it determined appropriate, including, the vested status of each executive officer's current equity holdings, the executive officer's role and position within our organization, and the expected future contributions of these executive officers.

In connection with his hiring, Dr. Ehrlich received an option covering 425,000 shares. This option has an exercise price per share of \$10.29 per share and vests as to 1/4th of the shares subject to the option on the one-year anniversary of the vesting start date and as to 1/48th of the shares subject to the option each month thereafter, in each case, subject to continued service through each applicable vesting date. In addition, on the effective date of the filing of a registration statement on Form S-8 under the Securities Act, Dr. Ehrlich will receive an award of 60,000 restricted stock units. The restricted stock unit award granted to Dr. Ehrlich will vest as to 50% of the restricted stock units 12 months after the award's grant date, as to 25% of the restricted stock units 24 months after the award's grant date, in each case, subject to continued service through each applicable vesting date.

In September 2018, our executive officers were granted the following options to purchase shares of our common stock, subject to and effective upon the effectiveness of the registration statement of which this prospectus forms a part: (1) an option covering 540,791 shares to Dr. Perlroth, (2) an option covering 161,662 shares to Mr. Borgeson, (3) an option covering 69,820 shares to Dr. Liang, and (4) an option covering 56,682 shares to Dr. Ehrlich. Each option has an exercise price per share equal to the fair market value of a share of our common stock as of the effective date of the registration statement of which this prospectus forms a part, which price will be the same as the price set forth on the cover page of this prospectus. Each option vests as to 1/60th of the shares subject to the option on each monthly anniversary of the grant date, in each case, subject to continued service through each applicable vesting date. These options in connection with this offering in order to provide additional incentives for our executive officers to drive growth in our business following the offering. In determining the size of these option grants, we considered the median size of equity awards granted by similarly situated companies and our executives' past and expected future contributions to our company.

The vesting of each grant described in this section is subject to the vesting acceleration provisions in the applicable executive officer's employment agreement that are described in the "Executive Employment Arrangements" section below.

### **Executive Employment Arrangements**

We have entered into written offer letters setting forth the terms and conditions of employment for each of our named executive officers, as described below. These agreements provide for at-will employment. In addition, each of our named executive officers has executed our standard form of confidential information, invention assignment and arbitration agreement.

# Victor Perlroth

Dr. Victor Perlroth has been our Chief Executive Officer and director since inception in June 2009. In September 2018, we entered into an employment agreement with Dr. Perlroth in connection with this offering. Dr. Perlroth's annual base salary is currently \$399,228 and will increase to \$516,000 upon the effectiveness of the registration statement of which this prospectus forms a part. Dr. Perlroth is considered annually for a target

bonus, which is currently equal to 45% of his annual base salary and will be increased to 50% of his annual base salary upon the effectiveness of the registration statement of which this prospectus forms a part.

Dr. Perlroth's employment agreement also provides that if his employment is terminated without "cause", or he terminates his employment for "good reason" (as such terms are defined in his employment agreement), he is entitled to (1) a lump sum payment equal to 18 months base salary, (2) a lump sum payment equal to his maximum target annual bonus, prorated for the portion of the fiscal year elapsed as of the termination date (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a "corporate transaction" (as defined in his employment agreement), 150% of his maximum target annual bonus, without proration), (3) if he elects to continue receiving health care and dental coverage under COBRA, our payment of the premiums for such continuation coverage for up to 18 months, or if such payments are not permitted by law, monthly taxable payments to him in lieu of our payment of such COBRA premiums, and (4) accelerated vesting of his outstanding equity awards equal to the portion of the equity awards that would have vested had he continued to be employed by us during the 12-month period after his termination (or if his termination occurs on or within 24 months of a corporate transaction, 100% of the unvested portions of the equity awards. In addition, if on the date 24 months immediately following the consummation of any corporate transaction Dr. Perlroth is providing services to the acquiring company (or its subsidiaries or parent) as either an employee or a consultant, then 100% of Dr. Perlroth's outstanding equity awards will vest. The receipt of benefits specified in this paragraph is conditioned upon Dr. Perlroth's execution and non-revocation of a customary release of claims with us.

### John Borgeson

John Borgeson has been our Chief Financial Officer since June 2014, initially on a consulting basis. In September 2018, we entered into an amended employment agreement with Mr. Borgeson in connection with this offering. Mr. Borgeson's annual base salary is currently \$306,168 and will increase to \$393,000 upon the effectiveness of the registration statement of which this prospectus forms a part. Mr. Borgeson is considered annually for a target bonus, which is currently equal to 35% of his annual base salary and will be increased to 40% of his annual base salary upon the effectiveness of the registration statement of which this prospectus forms a part.

Mr. Borgeson's amended employment agreement also provides that if his employment is terminated without "cause", or he terminates his employment for "good reason" (as such terms are defined in his amended employment agreement), he is entitled to (1) a lump sum payment equal to 9 months base salary (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a "corporate transaction" (as defined in his amended employment agreement), 12 months base salary), (2) a lump sum payment equal to his maximum target annual bonus, prorated for the portion of the fiscal year elapsed as of the termination date (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a corporate transaction, 100% of his maximum target annual bonus, without proration), (3) if he elects to continue receiving health care and dental coverage under COBRA, our payment of the premiums for such continuation coverage for up to 9 months (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a corporate transaction, 100% of his maximum target annual bonus, without proration), (3) if he elects to continue receiving health care and dental coverage under COBRA, our payment of the premiums for such continuation coverage for up to 9 months (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a corporate transaction, for up to 12 months), or if such payments are not permitted by law, monthly taxable payments to him in lieu of our payment of such COBRA premiums, and (4) accelerated vesting of his outstanding equity awards equal to the portion of the termination occurs on or within 24 months of a corporate transaction, 100% of Mr. Borgeson is providing services to the acquiring company (or its subsidiaries or parent) as either an employee or a consultant, then 100% of Mr. Borgeson's outstanding equity awards will vest. The receipt of benefits specified in this paragraph is condit

# Hong Liang

Dr. Hong Liang has been our Senior Vice President, Discovery Medicine since October 2017, prior to which she had served as our Vice President, Discovery Medicine since December 2015. In September 2018, we entered

into an amended employment agreement with Dr. Liang in connection with this offering. Dr. Liang's annual base salary is currently \$285,000 and will increase to \$355,000 upon the effectiveness of the registration statement of which this prospectus forms a part. Dr. Liang is considered annually for a target bonus, which is equal to 35% of her annual base salary.

Dr. Liang's employment agreement also provides that if her employment is terminated without "cause", or she terminates her employment for "good reason" (as such terms are defined in her amended employment agreement), she is entitled to (1) a lump sum payment equal to 9 months base salary, (2) a lump sum payment equal to her maximum target annual bonus, prorated for the portion of the fiscal year elapsed as of the termination date (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a "corporate transaction" (as defined in her employment agreement), 75% of her maximum target annual bonus, without proration), (3) if she elects to continue receiving health care and dental coverage under COBRA, our payment of the premiums for such continuation coverage for up to 9 months or if such payments are not permitted by law, monthly taxable payments to her in lieu of our payment of such COBRA premiums, and (4) accelerated vesting of her outstanding equity awards equal to the portion of the equity awards that would have vested had she continued to be employed by us during the 12-month period after her termination (or if her termination occurs on or within 24 months of a corporate transaction, 100% of the unvested portions of the equity awards). In addition, if on the date 24 months immediately following the consumtation of any corporate transaction Dr. Liang is providing services to the acquiring company (or its subsidiaries or parent) as either an employee or a consultant, then 100% of Dr. Liang's outstanding equity awards will vest. The receipt of benefits specified in this paragraph is conditioned upon Dr. Liang's execution and non-revocation of a customary release of claims with us.

### Jason Ehrlich

In August 2018, we entered into an employment agreement with Dr. Ehrlich in connection with the commencement of his employment with us. In September 2018, we entered into an amended employment arrangement with Dr. Ehrlich in connection with this offering. Dr. Ehrlich's annual base salary is currently \$440,000, and Dr. Ehrlich is considered annually for a target bonus equal to 40% of his annual base salary. In connection with the commencement of his employment, Dr. Ehrlich received the option and restricted stock unit award described under the "2018 Executive Officer Equity Awards" section above. In addition, in connection with his hiring, Dr. Ehrlich received a \$200,000 cash retention bonus, which will be repayable by him to us on a pro-rated basis if his employment is terminated by us for "cause" or by him without "good reason" (as such terms are defined in his amended employment agreement) before the second anniversary of the effective date of his original employment agreement. Dr. Ehrlich is also eligible to receive an allowance of up to \$10,000 per month for the first 36 months following his start date for his housing and travel expenses incurred while he is employed by us.

Dr. Ehrlich's amended employment agreement also provides that if his employment is terminated without cause, or he terminates his employment for good reason, he is entitled to (1) a lump sum payment equal to 9 months base salary (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a "corporate transaction" (as defined in his amended employment agreement) and ending 24 months after a corporate transaction, 12 months' base salary), (2) a lump sum payment equal to his maximum target annual bonus, prorated for the portion of the fiscal year elapsed as of the termination date (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a corporate transaction, 100% of his maximum target annual bonus, without proration), (3) if he elects to continue receiving health care and dental coverage under COBRA, our payment of the premiums for such continuation coverage for up to 9 months (or if the termination occurs during the period beginning 3 months prior to and ending 24 months after a corporate transaction, for up to 12 months), or if such payments are not permitted by law, monthly taxable payments to him in lieu of our payment of such COBRA premiums, and (4) accelerated vesting of his outstanding equity awards equal to the portion of the equity awards that would have vested had he continued to be employed by us during the 12-month period after his termination (or if his termination occurs on or within 24 months of a corporate transaction, 100% of the unvested portions of the equity awards). In addition, if on the

date 24 months immediately following the consummation of any corporate transaction Dr. Ehrlich is providing services to the acquiring company (or its subsidiaries or parent) as either an employee or a consultant, then 100% of Dr. Ehrlich's outstanding equity awards will vest. The receipt of benefits specified in this paragraph is conditioned upon Dr. Ehrlich's execution and non-revocation of a customary release of claims with us.

# **Employee Benefit Plans**

### 2015 Share Incentive Plan

Our board of directors adopted our 2015 Share Incentive Plan, or the 2015 Plan, in September 2015. Our stockholders approved the 2015 Plan in September 2015. Our 2015 Plan allows for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, to our employees and our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options and restricted stock to employees, directors, and consultants of ours or any of our parents, subsidiaries, or affiliates and to members of our board of directors.

#### Authorized Shares

As of June 30, 2018, 398,693 shares of our common stock were reserved for future issuance under our 2015 Plan. Our 2015 Plan was terminated in connection with the adoption of our 2018 Equity Incentive Plan. Accordingly, no awards will be granted under the 2015 Plan following the completion of this offering, but our 2015 Plan will continue to govern outstanding awards granted thereunder. As of June 30, 2018, options to purchase 3,383,478 shares of our common stock remained outstanding under our 2015 Plan.

#### Plan Administration

Our board of directors or a committee of our board of directors administers our 2015 Plan. Subject to the provisions of our 2015 Plan, the administrator has the power to administer the plan, including but not limited to, the power to determine the fair market value of our common stock; to select the eligible employees, directors, and consultants to whom awards are granted; to determine the number of shares to be covered by each award; to determine the terms and conditions of any award; to amend any outstanding award; to determine whether and under what circumstances an option may be settled in cash instead of shares; to implement and establish the terms and conditions of a program whereby outstanding options (1) are exchanged for options with a lower exercise price or restricted stock or (2) are amended to decrease the exercise price as a result of a decline in the fair market value of our common stock; and to construe and interpret the terms of our 2015 Plan, any award agreement, and any other agreement related to an award. The administrator's interpretations and decisions will be final and binding on all participants.

#### Options

Options may be granted under our 2015 Plan. The exercise price per share of all options is determined by the administrator, but the exercise price per share of incentive stock options must equal at least 100% of the fair market value per share of our common stock on the date of grant. The term of an option may not exceed 10 years. With respect to any participant who owned 10% of the voting power of all classes of outstanding stock of ours or any parent or subsidiary of ours as of the grant date, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price per share of such incentive stock option must be at least 110% of the fair market value per share of our common stock on the date of grant, as determined by the administrator. The administrator determines the terms and conditions of options.

The award agreements for options granted under our 2015 Plan generally provide that if a participant's employment is terminated before a change in control (as defined in the award agreement) by us other than for cause (as defined in the award agreement), death, or disability or by the participant for good reason (as defined in the award agreement), then the option will immediately vest to the extent the option would have vested had the participant continued to be employed by us for 12 months. In addition, the award agreements for options granted under our 2015 Plan generally also provide that options will become fully vested (1) 24 months after a change in

control if the participant is providing services to the acquiring company as either an employee or a consultant on that date or (2) upon termination of the participant's employment within 24 months after a change in control either by us other than for cause, death, or disability or by the participant for good reason.

After termination of a participant's service, he or she will be able to exercise the vested portion of his or her option for the period of time stated in his or her award agreement. The award agreements for options granted under our 2015 Plan generally provide that options will remain exercisable until the earliest of: (1) 18 months after the participant's death if he or she dies during his or her continuous service or within three months after termination of service; (2) 12 months after termination due to disability; (3) three months after termination of service for any other reason, subject to extension in certain circumstances due to the exercise of the option being prevented by applicable laws; (4) the option's expiration date; and (5) the 10<sup>th</sup> anniversary of the option's grant date. In no event will an option be exercisable after the expiration of its term.

# Restricted Stock

Awards of restricted stock may be granted under our 2015 Plan. Restricted stock awards are grants of shares of common stock that vest in accordance with terms and conditions established by the administrator. The administrator determines the number of shares of restricted stock awarded to any employee, director or consultant and, subject to the provisions of our 2015 Plan, determines the terms and conditions of such awards. The administrator may impose whatever conditions to vesting it determines to be appropriate. The administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally have voting and dividend rights with respect to such shares upon grant without regard to vesting. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

#### Non-Transferability of Awards

Unless our administrator provides otherwise, our 2015 Plan generally does not allow for the transfer of awards and only the recipient of an award will be permitted to exercise an award during his or her lifetime.

#### Certain Adjustments

In the event of certain changes in our capitalization, the administrator will make proportionate adjustments to the number and class of shares that may be delivered under our 2015 Plan and/or the number, class and price of shares covered by each outstanding award.

### Liquidation or Dissolution

In the event of our proposed liquidation or dissolution, each award will terminate immediately prior to the completion of such proposed transaction, unless otherwise determined by the administrator.

### Corporate Transaction

Our 2015 Plan provides that, unless otherwise described in an award agreement, in the event of a corporate transaction (as defined in our 2015 Plan), each outstanding option will either be (1) assumed or an equivalent option or right will be substituted by the successor corporation (or a parent or subsidiary of the successor corporation), or (2) terminated in exchange for a payment of cash, securities and/or other property equal to the excess of the fair market value of the portion of the shares underlying the portion of the option that is vested and exercisable immediately prior to the consummation of the corporate transaction over the per share exercise price of the option. If the successor corporation (or a parent or subsidiary of the successor corporation) does not agree to such assumption, substitution, or exchange, each such option will terminate upon the completion of the corporate transaction. Unless a participant's award agreement, employment agreement or other written agreement provides otherwise, if the corporate transaction constitutes a triggering event (as defined in our 2015 Plan) and any outstanding option held by a participant is to be terminated (in whole or in part), each such option will become fully vested and exercisable before the completion of the triggering event as uch conditions as the administrator determines. The administrator will notify the participant that the option will terminate at least five days before the date the option terminates.

### Amendment or Termination

Our board of directors may amend or terminate our 2015 Plan at any time, provided that such action does not materially and adversely affect a participant's rights under outstanding awards without such participant's consent. As noted above, in connection with the adoption of our 2018 Equity Incentive Plan, our 2015 Plan was terminated and no further awards will be granted thereunder. All outstanding awards will continue to be governed by their existing terms.

# 2018 Equity Incentive Plan

Our board of directors has adopted, and our stockholders have approved, a 2018 Equity Incentive Plan, or the 2018 Plan, which became effective on the business day prior to the effectiveness of the registration statement of which this prospectus forms a part. Our 2018 Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees and consultants of ours or any of our parent or subsidiary corporations and to members of our board of directors.

## Authorized Shares

We have reserved a total of 4,300,000 shares of our common stock for issuance pursuant to our 2018 Plan plus (1) those shares that, as of the effective date of the registration statement relating to the offering, were reserved but unissued under our 2015 Plan and were not subject to awards granted thereunder and (2) shares of our common stock subject to stock options, restricted stock units, or similar awards granted under the 2015 Plan or our 2009 Option and Profits Interest Plan that, on or after the effectiveness of the registration statement of which this prospectus forms a part, expire or otherwise terminate without having been exercised in full, are tendered to or withheld by us for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by us due to failure to vest, (provided that the maximum number of shares that may be added to our 2018 Plan pursuant to (1) and (2) is 3,800,000 shares). The number of shares that will be available for issuance under our 2018 Plan also will include an annual increase on the first day of each fiscal year beginning in 2019, equal to the least of:

- 4,300,000 shares;
- 4% of the outstanding shares of common stock as of the last day of the immediately preceding year; and
- · such other amount as our board of directors may determine.

The shares may be authorized, but unissued or reacquired shares of common stock.

If an award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an exchange program, or, with respect to restricted stock, restricted stock units, performance units, or performance shares, is forfeited to or repurchased due to failure to vest, the unpurchased shares (or for awards other than stock options or stock appreciation rights, the forfeited or repurchased shares) will become available for future grant or sale under our 2018 Plan. With respect to stock appreciation rights, only the net shares actually issued will cease to be available under our 2018 Plan and all remaining shares under stock appreciation rights will remain available for future grant or sale under our 2018 Plan. Shares that have actually been issued under our 2018 Plan under any award will not be returned to our 2018 Plan; provided, however, that if shares issued pursuant to awards of restricted stock, restricted stock units, performance shares, or performance units are repurchased or forfeited, such shares will become available for future grant under our 2018 Plan. Shares used to pay the exercise price of an award or satisfy the tax withholding obligations related to an award will become available for future grant or sale under our 2018 Plan. Shares used to pay the exercise price of an award or satisfy the tax withholding obligations related to an award will become available for future grant or sale under our 2018 Plan. To the extent an award is paid out in cash rather than shares, such cash payment will not result in a reduction in the number of shares available for issuance under our 2018 Plan.

### Plan Administration

Our board of directors and compensation committee have full but non-exclusive authority to administer our 2018 Plan. In addition, if desirable, we may structure transactions under our 2018 Plan to be exempt under Rule 16b-3 of the Exchange Act. Subject to the provisions of our 2018 Plan, the administrator has the power to administer our 2018 Plan and make all determinations deemed necessary or advisable for administering our 2018 Plan, including, but not limited to, the power to:

- · interpret the terms of our 2018 Plan and awards granted under it;
- · select the eligible employees, consultants, and directors who receive awards;
- create, amend, and revoke rules relating to the 2018 Plan, including creating sub-plans;
- determine the terms of awards, including the exercise price, the number of shares subject to an award, the exercisability of awards, and the form of consideration, if any, payable upon exercise;
- · amend existing awards;
- institute and determine the terms of an exchange program by which (1) outstanding awards are surrendered or cancelled in exchange for awards of the same type which may have a higher or lower exercise price and/or different terms, awards of a different type and/or cash, (2) participants have the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator, or (3) the exercise price of an outstanding award is increased or reduced; and
- make all other determinations necessary or advisable for administering our 2018 Plan.

The administrator's decisions, interpretations, and other actions will be final and binding on all participants.

### Stock Options

We will be able to grant stock options under our 2018 Plan. The per share exercise price of options granted under our 2018 Plan must be equal to at least the fair market value of a share of our common stock on the grant date of the award. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns more than 10% of the voting power of all classes of stock of ours or any of our parent or subsidiary corporations, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value of a share of our common stock on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares, or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of a participant, he or she may exercise his or her option for the period of time stated in his or her award agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the option will remain exercisable for 12 months. In all other cases, in the absence of a specified time in an award agreement, the option will remain exercisable for three months following the termination of service. An option may not be exercised later than the expiration of its term. Subject to the provisions of our 2018 Plan, the administrator determines the other terms of options, including any vesting and exercisability requirements, and treatment of the award upon the participant's termination of service. Options granted under our 2018 Plan generally will be subject to the following special vesting acceleration provisions in connection with the participant's termination of employment, subject to the participant's timely execution and delivery of a release and waiver of claims agreement:

- If, at any time before a change in control, the participant's employment is terminated by us without cause and other than for death or disability, or by the participant with good reason, then that number of shares subject to the option as would have vested in the 12-month period following the employment termination date, had the participant continued to be employed by us for such period, will vest, effective as of the date the release becomes effective.
- If within 24 months following a change in control, the participant's employment is terminated by us without cause and other than for death or disability, or by the participant for good reason, then 100% of

the shares subject to the option that remain unvested will vest and become exercisable in full, effective as of the date the release becomes effective.

### Stock Appreciation Rights

We will be able to grant stock appreciation rights under our 2018 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the grant date and the exercise date. Stock appreciation rights may not have a term exceeding ten years. After the termination of service of the participant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her award agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the stock appreciation rights will remain exercisable for 12 months. In all other cases, in the absence of a specified time in an award agreement, the stock appreciation rights will remain exercisable for three months following the termination of service. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2018 Plan, the administrator determines the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

### Restricted Stock

We will be able to grant restricted stock under our 2018 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee, director, or consultant and, subject to the provisions of our 2018 Plan, will determine the terms and conditions of such awards. The administrator may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise. Shares of restricted stock that do not vest will be subject to our right of repurchase or forfeiture.

### Restricted Stock Units

We will be able to grant restricted stock units under our 2018 Plan. Each restricted stock unit represents an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2018 Plan, the administrator determines the terms and conditions of restricted stock units, including the vesting criteria and the form and timing of payment. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit, or individual goals (such as continued employment or service), applicable federal or state securities laws, or any other basis determined by the administrator in its discretion. The administrator has the discretion to pay earned restricted stock units in the form of cash, in shares of our common stock, or in some combination thereof. The administrator also has the discretion to accelerate the time at which any restrictions will lapse or be removed. Restricted stock units granted under our 2018 Plan generally will be subject to the following special vesting acceleration provisions in connection with the participant's termination of employment, subject to the participant's timely execution and delivery of a release and waiver of claims agreement:

• If, at any time before a change in control, the participant's employment is terminated by us without cause and other than for death or disability, or by the participant with good reason, then that number of restricted stock units as would have vested in the 12-month period following the employment termination date, had the participant continued to be employed by us for such period, will vest, effective as of the date the release becomes effective.

• If within 24 months following a change in control, the participant's employment is terminated by us without cause and other than for death or disability, or by the participant for good reason, then 100% of the restricted stock units that remain unvested will vest, effective as of the date the release becomes effective.

### Performance Units and Performance Shares

We will be able to grant performance units and performance shares under our 2018 Plan. Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish performance objectives or other vesting criteria in its discretion, which, depending on the extent to which they are met, will determine the number and/or the value of performance units and performance shares to be paid out to participants. The administrator may set performance objectives based on the achievement of company-wide, divisional, business unit, or individual goals (such as continued employment or service), applicable federal or state securities laws, or any other basis determined by the administrator in its discretion. After the grant of a performance units will have an initial dollar value established by the administrator on or prior to the grant date. Performance shares will have an initial value equal to the fair market value of the underlying shares of our common stock, or in some combination thereof.

### Non-Employee Directors

Our 2018 Plan provides that all non-employee directors will be eligible to receive all types of awards (except for incentive stock options). Our 2018 Plan includes a maximum annual limit of \$500,000 (increased to \$1,000,000 in connection with initial service on our board) of cash compensation and equity awards that may be paid, issued, or granted to a non-employee director in any fiscal year. For purposes of this limitation, the value of equity awards is based on the grant date fair value (determined in accordance with GAAP). Any cash compensation paid or equity awards granted to a person for his or her services as an employee, or for his or her services as a consultant (other than as a non-employee director), will not count for purposes of the limitation. The maximum limit does not reflect the intended size of any potential compensation or equity awards to our non-employee directors.

### Non-Transferability of Awards

Unless the administrator provides otherwise, our 2018 Plan generally will not allow for the transfer of awards, and only the recipient of an award will be able to exercise an award during his or her lifetime. If the administrator makes an award transferrable, such award will contain such additional terms and conditions as the administrator deems appropriate.

#### Certain Adjustments

In the event of any dividend or other distribution, recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of our shares or other securities, or other change in our corporate structure affecting our shares, in order to prevent diminution or enlargement of the benefits or potential benefits available under our 2018 Plan, the administrator will adjust the number and class of shares that may be delivered under our 2018 Plan or the number, class and price of shares covered by each outstanding award, and any numerical share limits set forth in our 2018 Plan.

#### Liquidation or Dissolution

In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

### Merger or Change in Control

Our 2018 Plan provides that in the event of a merger or change in control, as defined under our 2018 Plan, each outstanding award will be treated as the administrator determines, without a requirement to obtain a participant's consent. The administrator will not be required to treat all awards, all awards held by a participant, or all awards of the same type, similarly.

In the event that a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and such award will become fully exercisable, if applicable, for a specified period prior to the transaction, unless specifically provided for otherwise under the applicable award agreement written agreement with the participant. The award will then terminate upon the expiration of the specified period of time. If an option or stock appreciation right is not assumed or substituted, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period.

In addition, in the event of a change in control, and unless otherwise agreed, each outside director's options and stock appreciation rights, if any, will vest fully and become immediately exercisable, all restrictions on his or her restricted stock and restricted stock units will lapse and all performance goals or other vesting requirements for his or her performance shares and units will be deemed achieved at 100% of target levels, and all other terms and conditions met.

Options and restricted stock units granted under our 2018 Plan generally will provide that, subject to the participant's timely execution and delivery of a release and waiver of claims agreement, if (1) on the date 24 months immediately following a change in control, the participant is providing services to the acquiring company as either an employee or a consultant or (2) within 24 months following a change in control, the participant's employment is terminated by us without cause and other than for death or disability, or by the participant for good reason, then in either case, 100% of the portion of the award that remain unvested will vest and become exercisable (if applicable) in full, effective as of the date the release becomes effective.

### Forfeiture and Clawback

All awards granted under our 2018 Plan will be subject to recoupment under any clawback policy that we are required to adopt under applicable law. In addition, the administrator may provide in an award agreement that the recipient's rights, payments, and benefits with respect to such award shall be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events. In the event of any accounting restatement, the recipient of an award will be required to repay a portion of the proceeds received in connection with the settlement of an award earned or accrued under certain circumstances.

### Amendment or Termination

The administrator will have the authority to amend, suspend or terminate our 2018 Plan provided such action does not impair the existing rights of any participant. Our 2018 Plan automatically will terminate in 2028, unless we terminate it sooner.

### 2018 Employee Stock Purchase Plan

Our board of directors has adopted, and our stockholders have approved, a 2018 Employee Stock Purchase Plan, or the ESPP, which became effective on the business day prior to the effectiveness of the registration statement of which this prospectus forms a part. However, no offering period or purchase period under our ESPP will begin unless and until determined by our board of directors.

#### Authorized Shares

A total of 460,000 shares of our common stock will be available for sale under our ESPP. The number of shares of our common stock that will be available for sale under our ESPP also includes an annual increase on

the first day of each fiscal year beginning for the fiscal year following the fiscal year in which the first offering period enrollment date (if any) occurs, equal to the least of:

- 920,000 shares of our common stock;
- 1% of the outstanding shares of common stock as of the last day of the immediately preceding year; and
- · such other amount as the administrator may determine.

### Plan Administration

Our board of directors and compensation committee have full but non-exclusive authority to administer our ESPP and have full but non-exclusive authority to interpret the terms of our ESPP and determine eligibility to participate, subject to the conditions of our ESPP, as described below. The administrator has full and exclusive discretionary authority to construe, interpret, and apply the terms of our ESPP, to delegate ministerial duties to any of our employees, to designate separate offerings under our ESPP, to designate our subsidiaries and affiliates as participating in our ESPP, to determine eligibility, to adjudicate all disputed claims filed under our ESPP and to establish procedures that it deems necessary or advisable for the administration of our ESPP, including, but not limited to, adopting such procedures, sub-plans, and appendices to the enrollment agreement as are necessary or appropriate to permit participation in our ESPP by employees who are foreign nationals or employed outside the U.S. The administrator's findings, decisions, and determinations will be final and binding on all participants to the full extent permitted by law.

### Eligibility

Generally, all of our employees are eligible to participate if they are customarily employed by us, or any participating subsidiary, for at least 20 hours per week and more than five months in any calendar year. The administrator, in its discretion, may, prior to an enrollment date for all options granted on such enrollment date in an offering, determine that an employee who (1) has not completed at least two years of service (or a lesser period of time determined by the administrator), since his or her last hire date, (2) customarily works not more than 20 hours per week (or a lesser period of time determined by the administrator), (3) customarily works not more than five months per calendar year (or a lesser period of time determined by the administrator), (4) is a highly compensated employee within the meaning of Section 414(q) of the Code, and (5) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to disclosure requirements under Section 16(a) of the Exchange Act, will or will not eligible to participate in such offering period.

However, an employee may not be granted rights to purchase shares of our common stock under our ESPP if such employee:

- immediately after the grant would own capital stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock; or
- hold rights to purchase shares of our common stock under all of our employee stock purchase plans that accrue at a rate that exceeds \$25,000 worth of shares of our common stock for each calendar year.

### Offering Periods and Purchase Periods

Our ESPP includes a component that allows us to make offerings intended to qualify under Section 423 of the Code and a component that allows us to make offerings not intended to qualify under Section 423 of the Code to designated companies, as described in our ESPP. No offerings have been authorized to date by our board of directors under our ESPP. If our board of directors authorizes an offering period under our ESPP, our board of directors will be authorized to establish the duration of offering periods and purchase periods, including the starting and ending dates of offering periods and purchase periods, provided that no offering period may have a duration exceeding 27 months.

# Contributions

Our ESPP permits participants to purchase shares of our common stock through contributions (in the form of payroll deductions or otherwise to the extent permitted by the administrator) of their eligible compensation, up to an amount determined by the administrator. A participant may purchase a maximum number of shares of our common stock during a purchase period as determined by the plan administrator in accordance with the ESPP.

# Exercise of Purchase Right

If our board of directors authorizes an offering and purchase period under our ESPP, amounts contributed and accumulated by the participant during any offering period will be used to purchase shares of our common stock at the end of each purchase period established by our board of directors. The purchase price of the shares will be determined by the administrator. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of our common stock. Participation ends automatically upon termination of employment with us.

### Non-Transferability

A participant may not transfer rights granted under our ESPP. If our compensation committee permits the transfer of rights, it may only be done by will, the laws of descent and distribution, or as otherwise provided under our ESPP.

# Merger or Change in Control

Our ESPP provides that in the event of a merger or change in control, as defined under our ESPP, a successor corporation may assume or substitute each outstanding purchase right. If the successor corporation refuses to assume or substitute for the outstanding purchase right, the offering period then in progress will be shortened, and a new exercise date will be set that will be before the date of the proposed merger or change in control. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

### Amendment or Termination

The administrator will have the authority to amend, suspend, or terminate our ESPP, except that, subject to certain exceptions described in our ESPP, no such action may adversely affect any outstanding rights to purchase shares of our common stock under our ESPP. Our ESPP automatically will terminate in 2038, unless we terminate it sooner.

#### **Executive Incentive Compensation Plan**

In August 2018, our board of directors adopted our Executive Incentive Compensation Plan, or the Incentive Compensation Plan. Our Incentive Compensation Plan allows us to grant incentive awards, generally payable in cash, to employees selected by the administrator of the Incentive Compensation Plan, including our named executive officers, based upon performance goals established by the administrator.

Under our Incentive Compensation Plan, the administrator determines the performance goals applicable to any award, which goals may include, without limitation, goals related to research and development, regulatory milestones or regulatory-related goals, gross margin, financial milestones, new product or business development, operating margin, product release timelines or other product release milestones, publications, cash flow, procurement, savings, internal structure, leadership development, project, function or portfolio-specific milestones, license or research collaboration agreements, capital raising, initial public offering preparations, patentability and individual objectives such as peer reviews or other subjective or objective criteria. The performance goals may differ from participant to participant and from award to award.

A committee appointed by our board of directors (which, until our board of directors determines otherwise, will be our compensation committee) administers our Incentive Compensation Plan. The administrator of our

Incentive Compensation Plan may, in its sole discretion and at any time, increase, reduce or eliminate a participant's actual award, and/or increase, reduce or eliminate the amount allocated to the bonus pool for a particular performance period. The actual award may be below, at or above a participant's target award, in the discretion of the administrator. The administrator may determine the amount of any increase, reduction or elimination on the basis of such factors as it deems relevant, and it is not required to establish any allocation or weighting with respect to the factors it considers.

Actual awards generally will be paid in cash (or its equivalent) only after they are earned, and, unless otherwise determined by the administrator, to earn an actual award a participant must be employed by us through the date the actual award is paid. The administrator reserves the right to settle an actual award with a grant of an equity award under our then-current equity compensation plan, which equity award may have such terms and conditions, including vesting, as the administrator determines. Payment of awards occurs as soon as practicable after they are earned, but no later than the dates set forth in our Incentive Compensation Plan.

Our board of directors and the administrator have the authority to amend, suspend or terminate our Incentive Compensation Plan, provided such action does not impair the existing rights of any participant with respect to any earned awards.

# 401(k) Plan

We maintain a tax-qualified 401(k) retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to defer eligible compensation subject to applicable annual Code limits. All participants' interests in their deferrals are 100% vested when contributed. The 401(k) plan permits us to make matching contributions and profit sharing contributions to eligible participants, although we have not made any such contributions to date. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to qualify under Sections 401 (a) and 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan, and all contributions are deductible by us when made. The 401(k) plan also permits contributions to be made on a post-tax basis for those employees participating in the Roth 401(k) plan component.

### Limitation of Liability and Indemnification Matters

Our certificate of incorporation and bylaws, each to be effective upon completion of this offering, will provide that we will indemnify our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted by the Delaware General Corporation Law, which prohibits us from limiting the liability of our directors for the following:

- · any breach of the director's duty of loyalty to us or to our stockholders;
- · acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- · unlawful payment of dividends or unlawful stock repurchases or redemptions; and
- · any transaction from which the director derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further limiting the personal liability of a director, then the liability of our directors will be limited to the fullest extent permitted by Delaware law, as so amended. Our certificate of incorporation does not eliminate a director's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. This provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under our bylaws, we will also be empowered to purchase insurance on behalf of any person whom we are required or permitted to indemnify.

In addition to the indemnification required in our certificate of incorporation and bylaws, we have entered into indemnification agreements with each of our current directors, officers and some employees. These

agreements provide for the indemnification of our directors, officers and some employees for certain expenses and liabilities incurred in connection with any action, suit, proceeding or alternative dispute resolution mechanism, or hearing, inquiry or investigation that may lead to the foregoing, to which they are a party, or are threatened to be made a party, by reason of the fact that they are or were a director, officer, employee, agent or fiduciary of us, or any of our subsidiaries, by reason of any action or inaction by them while serving as an officer, director, agent or fiduciary, or by reason of the fact that they were serving at our request as a director, officer, employee, agent or fiduciary of another entity. In the case of an action or proceeding by or in the right of us or any of our subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified party is prohibited from receiving indemnification. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have 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. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

# CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2015 to which we have been a party in which the amount involved exceeded \$120,000 and in which any of our executive officers, directors, promoters or beneficial holders of more than 5% of our capital stock had or will have a direct or indirect material interest, other than compensation arrangements which are described under the section of this prospectus captioned "Executive Compensation."

# **Related-Person Transactions Policy**

We have a formal, written policy, which became effective on the date of effectiveness of the registration statement of which this prospectus forms a part, that our executive officers, directors (including director nominees), holders of more than 5% of any class of our voting securities and any member of the immediate family of or any entities affiliated with any of the foregoing persons, are not permitted to enter into a related-person transaction with us without the prior approval or, in the case of pending or ongoing related-person transactions, ratification of our nominating and corporate governance committee. For purposes of our policy, a related-person transaction is a transaction, arrangement or relationship where the amount exceeds \$120,000, where we were, are or will be involved and in which a related-person had, has or will have a direct or indirect material interest.

Certain transactions with related persons, however, are exempted from pre-approval including, but not limited to:

- · compensation of our executive officers and directors that is otherwise disclosed in our public filings with the SEC;
- · compensation, benefits and other transactions available to all of our employees generally;
- transactions where a related-person's interest derives solely from his or her service as a director of another entity that is a party to the transaction;
- transactions where a related-person's interest derives solely from his or her ownership of less than 10% of the equity interest in another entity that is a party to the transaction; and
- transactions where a related-person's interest derives solely from his or her ownership of a class of our equity securities and all holders of that class received the same benefit on a pro rata basis.

No member of the nominating and corporate governance committee may participate in any review, consideration or approval of any relatedperson transaction where such member or any of his or her immediate family members is the related-person. In approving or rejecting the proposed agreement, our nominating and corporate governance committee shall consider the relevant facts and circumstances available and deemed relevant to the nominating and corporate governance committee, including, but not limited to:

- the benefits and perceived benefits to us;
- · the materiality and character of the related-person's direct and indirect interest;
- the availability of other sources for comparable products or services;
- · the terms of the transaction; and
- · the terms available to unrelated third parties under the same or similar circumstances.

In reviewing proposed related-person transactions, the nominating and corporate governance committee will only approve or ratify related-person transactions that are in, or not inconsistent with, the best interests of us and our stockholders.

The transactions described below were consummated prior to our adoption of the formal, written policy described above, and therefore the foregoing policies and procedures were not followed with respect to the transactions. However, we believe that the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described were comparable to terms available or the amounts that would be paid or received, as applicable, in arm's-length transactions.

# Sales of Securities

The following table sets forth a summary of the sale and issuance of our securities to related persons since January 1, 2015, other than compensation arrangements which are described under the sections of this prospectus captioned "Management-Director Compensation" and "Executive Compensation." For a description of beneficial ownership see the section of this prospectus captioned "Principal Stockholders."

	Shares of Series B Redeemable Convertible Preferred Stock	Principal Amount of 2017 Convertible Notes	Principal Amount of 2018 Convertible Notes	Shares of Series B Redeemable Convertible Preferred Stock Underlying Warrants
5% stockholders: Entities affiliated with Baker Bros. Advisors LP Dustin A. Moskovitz Trust DTD 12/27/05 Executive officers and directors:	5,000,000 1,000,000	\$ 3,000,000 5,000,000	\$ 6,560,000 3,000,000	150,000 250,000
Felix J. Baker	5,000,000	3,000,000	6,560,000	150,000

## Series B Redeemable Convertible Preferred Stock

From September 2015 to December 2015, we issued and sold to investors, including the Dustin A. Moskovitz Trust DTD 12/27/05, or DM, and entities affiliated with Baker Bros. Advisors LP, or Baker Brothers, an aggregate of 6,792,000 shares of Series B redeemable convertible preferred stock at \$5.00 per share, for aggregate proceeds of \$34.0 million. DM is an owner of 5% or more of our outstanding shares of common stock on an as-converted basis. Felix J. Baker, a member of our board of directors has voting and investment power over our securities held by Baker Brothers.

### 2017 Convertible Notes

In August 2017, we issued and sold \$10.0 million aggregate principal amount of our 2017 convertible notes and warrants to purchase shares of our Series B redeemable convertible preferred stock. The notes accrue interest at rate of 2.5% per month. Baker Brothers purchased \$3.0 million aggregate principal amount of the notes and a warrant to purchase an aggregate of 150,000 shares of our Series B redeemable convertible preferred stock. DM purchased \$5.0 million aggregate principal amount of the notes and a warrant to purchase an aggregate of 250,000 shares of our Series B redeemable convertible preferred stock.

### 2018 Convertible Notes

In February 2018, we issued and sold \$33.0 million aggregate principal amount of our 2018 convertible notes. The notes accrue interest at rate of 6.0% per year. Baker Brothers and DM purchased \$6.6 million and \$3.0 million aggregate principal amount of the notes, respectively. Nicole Thomson, Dr. Perlroth's sister, and her husband, Heath Thomson, jointly purchased a note with a principal amount of approximately \$0.2 million. Other purchasers of our 2018 convertible notes included entities affiliated with Perceptive Advisors and ArrowMark Partners.

### Purchases of Our Common Stock in This Offering

Investment entities affiliated with Baker Brothers have agreed to purchase an aggregate of 2,500,000 shares of our common stock in this offering at the initial public offering price. The underwriters will receive the same underwriting discounts and commissions on any shares purchased by Baker Brothers as they will on any other shares sold to the public in this offering.

### Stock Repurchases

In June 2015, we purchased 744,843 shares of our common stock from Stephen Charles, a founder and greater than 5% stockholder, for an aggregate purchase price of \$1.0 million.

# **Investors' Rights Agreement**

We have entered into an investors' rights agreement with certain of our stockholders, including Dr. Perlroth, our chief executive officer and chairman, and Baker Brothers. As of June 30, 2018, the holders of 12,385,154 shares of our common stock issuable upon conversion of outstanding redeemable convertible preferred stock, or their transferees, are entitled to rights with respect to the registration of their shares under the Securities Act. For a description of these registration rights, see the section of this prospectus titled "Description of Capital Stock—Registration Rights."

# **Voting Agreement**

The election of the members of the board of directors is governed by a voting agreement with certain of our stockholders, including Dr. Perlroth, our chief executive officer and chairman, and Baker Brothers. The parties to the voting agreement have agreed, subject to certain conditions, to vote their shares to elect as directors as follows:

- · one nominee designated by Baker Brothers, currently Dr. Baker;
- one nominee designated by the majority vote of our Series B redeemable convertible preferred stock, currently Dr. Levy;
- two nominees, one of which must be our chief executive officer, designated by the majority vote of our common stock, currently Dr. Perlroth and Dr. Dahiyat; and
- one nominee designated by the holders of a majority of the common stock issued or issuable upon the conversion of the redeemable convertible preferred stock, currently Mr. Profusek.

Upon the consummation of this offering, the obligations of the parties to the voting agreement to vote their shares to elect these nominees will terminate, and none of our stockholders will have any special rights regarding the nomination, election or designation of members of the board of directors. Our existing certificate of incorporation contains provisions that correspond to the voting agreement; however, the certificate of incorporation that will be effective immediately prior to the closing of this offering will not include such provisions.

### **Other Transactions**

We have entered into employment agreements with certain of our executive officers that, among other things, provide for certain severance and change of control benefits. For a description of these agreements, see the section of this prospectus titled "Executive Compensation—Executive Employment Arrangements."

We have granted stock options and restricted stock awards to our executive officers and to certain of our non-executive directors and one of our former non-executive directors. For a description of these options, see the sections titled "Management—Director Compensation" and "Executive Compensation."

We have entered into indemnification agreements with our directors and executive officers. For a description of these agreements, see the section of this prospectus titled "Management—Limitation of Liability and Indemnification Matters."

# PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of August 31, 2018 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- · each of the named executive officers;
- · each of our directors; and
- · all of our executive officers and directors as a group.

The percentage of beneficial ownership prior to the offering shown in the table is based upon 27,789,672 shares of common stock outstanding as of August 31, 2018, assuming the automatic conversion of all outstanding shares of redeemable convertible preferred stock into an aggregate of 12,385,154 shares of common stock; the conversion of \$13.1 million principal amount and accrued interest of our 2017 convertible notes as of August 31, 2018 at a conversion price of \$5.00 per share; the conversion of \$34.1 million principal amount and accrued interest of our 2018 convertible notes as of August 31, 2018 at a conversion price of \$8.00 per share; and the issuance of 500,000 shares of common stock issuable upon the exercise of warrants to purchase 500,000 shares of redeemable convertible preferred stock outstanding as of June 30, 2018 at an exercise price of \$0.01 per share. The percentage of beneficial ownership after this offering shown in the table is based on 36,789,672 shares of common stock outstanding after the closing of this offering, assuming no exercise of the underwriters' overallotment option and no purchase of shares in this offering by investment entities affiliated with Perceptive Life Sciences Master Fund, Ltd., or Perceptive, Baker Brothers and certain other existing securityholders.

Information with respect to beneficial ownership has been furnished by each director, officer or beneficial owner of more than 5% of our common stock. We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules take into account shares of common stock issuable pursuant to the exercise or conversion of stock options or warrants or convertible notes that are either immediately exercisable or convertible or exercisable or convertible on or before the 60th day after August 31, 2018. Certain of the options granted to our named executive officers may be exercised prior to the vesting of the underlying shares. These shares are deemed to be outstanding and beneficially owned by the person holding those options for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of that persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Kodiak Sciences Inc., 2631 Hanover Street, Palo Alto, California 94304.

	Shares Be Owned Pr Offer	Shares Beneficially Owned After the Offering		
	Number of	<b>D</b>	Number of	<b>D</b> (
Name of Beneficial Owner 5% and Greater Stockholders:	Shares	Percentage	Shares	Percentage
	( 795 709	24.40/	( 705 700	10 40/
Entities affiliated with Baker Bros. Advisors LP <sup>(1)</sup>	6,785,798	24.4%	6,785,798	18.4%
Victor Perlroth, M.D. <sup>(2)</sup>	5,011,538	17.5	5,011,538	13.3
Stephen Charles <sup>(3)</sup>	2,000,000	7.2	2,000,000	5.4
Dustin A. Moskovitz Trust DTD 12/27/05 <sup>(4)</sup>	2,950,216	10.6	2,950,216	8.0
Perceptive Life Sciences Master Fund, Ltd. <sup>(5)</sup>	1,940,651	7.0	1,940,651	5.3
Named Executive Officers and Directors:				
Victor Perlroth, M.D. <sup>(2)</sup>	5,011,538	17.5	5,011,538	13.3
John Borgeson <sup>(6)</sup>	288,679	1.0	288,679	*
Hong Liang, Ph.D. <sup>(7)</sup>	132,581	*	132,581	*
Jason Ehrlich, M.D., Ph.D.	_	_	_	_
Felix J. Baker, Ph.D. <sup>(1)</sup>	6,785,798	24.4	6,785,798	18.4
Bassil I. Dahiyat, Ph.D.	· · · · · · · · · · · · · · · · · · ·	_	_	_
Richard S. Levy, M.D.		_	_	_
Robert A. Profusek		_	_	_
All executive officers and directors as a group (8 persons) <sup>(8)</sup>	12,218,596	42.2	12,218,596	32.2

\* Represents ownership of less than 1%.

- (1) The shares of common stock beneficially owned by Baker Bros. Advisors LP, or BBA, are held by the following stockholders: (a) 372,792 shares of common stock owned by 667, L.P., or 667, (b) 11,184 shares of common stock underlying warrants issued to 667 that are exercisable within 60 days of August 31, 2018, (c) 58,696 shares of common stock underlying 2017 convertible notes held by 667 that are convertible within 60 days of August 31, 2018, (d) 85,956 shares of common stock underlying 2018 convertible notes held by 667 that are convertible within 60 days of August 31, 2018, (d) 85,956 shares of common stock underlying 2018 convertible notes held by 667 that are convertible within 60 days of August 31, 2018, (e) 4,627,208 shares of common stock underlying 2018 convertible notes held by 667 that are convertible notes held by BLS that are exercisable within 60 days of August 31, 2018, (g) 728,555 shares of common stock underlying 2017 convertible notes held by BBLS that are convertible within 60 days of August 31, 2018, (a) 62,591 shares of common stock underlying 2018 convertible notes held by BBLS that are convertible within 60 days of August 31, 2018, and (h) 762,591 shares of common stock underlying 2018 convertible notes held by BBLS that are convertible within 60 days of August 31, 2018. After giving effect to the agreement by investment entities affiliated with BBA to purchase 2,500,000 shares of our common stock in this offering, upon completion of this offering, BBA would beneficially own shares representing approximately 25.2% of our common stock (or 24.3% if the underwriters exercise their overallotment option in full) in the aggregate. BBA is the management company and investment adviser to 667 and BBLS and may be deemed to beneficially own all of the securities held by 667 and BBLS. Baker Bros. Advisors (GP) LLC, or BBA-GP, is the sole general partner of BBA. Felix J. Baker, a member of our board of directors, and Julian C. Baker Bros. Advisors (GP) LLC, or BBA-GP, is the sole general partner o
- (2) Consists of (a) 4,111,538 shares of common stock owned by Dr. Perlroth, and (b) 900,000 shares subject to options held by Dr. Perlroth that are immediately exercisable or exercisable within 60 days of August 31, 2018.
- (3) Consists of 2,000,000 shares of common stock owned by Dr. Charles. Dr. Charles was a cofounder of our company.
- (4) Consists of (a) 1,000,000 shares of common stock owned by Dustin A. Moskovitz Trust DTD 12/27/05, or DM, (b) 250,000 shares of common stock underlying warrants issued to DM that are exercisable within 60 days of August 31, 2018, (c) 1,312,086 shares of common stock underlying 2017 convertible notes held by DM that are convertible within 60 days of August 31, 2018 and (d) 388,130 shares of common stock underlying 2018 convertible notes held by DM that are convertible within 60 days of August 31, 2018 and (d) 388,130 shares of common stock underlying 2018 convertible notes held by DM that are convertible within 60 days of August 31, 2018.

- (5) Consists of 1,940,651 shares of common stock underlying 2018 convertible notes held by Perceptive that are convertible within 60 days of August 31, 2018. After giving effect to the agreement by investment entities affiliated with Perceptive to purchase 1,000,000 shares of our common stock in this offering, upon completion of this offering, Perceptive would beneficially own shares representing approximately 8.0% of our common stock (or 7.7% if the underwriters exercise their overallotment option in full) in the aggregate. Perceptive Advisors LLC, or Perceptive Advisors, serves as the investment manager to Perceptive Life Sciences Master Fund, Ltd., or Perceptive, and may be deemed to beneficially own the securities directly held by Perceptive. Joseph Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own the securities directly held by Perceptive. The address for Perceptive is 51 Astor Place, 10th Floor, New York, New York 10003.
- (6) Consists of (a) 170,899 shares of common stock owned by Mr. Borgeson and (b) 117,780 shares subject to options held by Mr. Borgeson that are immediately exercisable or exercisable within 60 days of August 31, 2018.
- (7) Consists of (a) 20,000 shares of common stock held by Dr. Liang and (b) 112,581 shares subject to options held by Dr. Liang that are immediately exercisable or exercisable within 60 days of August 31, 2018.
- (8) Consists of (a) 9,302,437 shares of common stock held by our current directors and executive officers and entities affiliated with certain of our current directors and executive officers, (b) 1,130,361 shares of common stock issuable pursuant to stock options held by such directors and officers that are exercisable within 60 days of August 31, 2018, (c) 150,000 shares of common stock issuable pursuant to warrants that are exercisable within 60 days of August 31, 2018, (d) 787,251 shares of common stock underlying 2017 convertible notes that are convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible notes that are convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible notes that are convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock underlying 2018 convertible within 60 days of August 31, 2018, and (e) 848,547 shares of common stock in this offering, upon completion of this offering, our directors and executive officers would beneficially own shares representing approximately 38.8% of our common stock in the aggregate (or 37.5% if the underwriters exercise their overallotment option in full).

## DESCRIPTION OF CAPITAL STOCK

This section provides a summary of the rights of our common stock and preferred stock. This summary is not complete. For more detailed information, please see our certificate of incorporation and bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part.

Upon the closing of this offering and the filing of our certificate of incorporation to be effective immediately prior to this offering, our authorized capital stock will consist of 490,000,000 shares of common stock, par value \$0.0001 per share, and 10,000,000 shares of preferred stock, par value \$0.0001 per share.

Immediately prior to the closing of this offering, all the outstanding shares of redeemable convertible preferred stock as of June 30, 2018 will automatically convert into an aggregate of 12,385,154 shares of common stock. Immediately following the closing of this offering and after giving effect to the conversion of redeemable convertible preferred stock into common stock, we expect a portion of the warrants to purchase an aggregate of 500,000 shares of common stock to be exercised.

#### **Common Stock**

#### **Outstanding Shares**

Based on 7,964,234 shares of common stock outstanding as of June 30, 2018, the conversion of redeemable convertible preferred stock outstanding as of June 30, 2018 into an aggregate of 12,385,154 shares of common stock upon the completion of this offering, the conversion of our convertible notes (assuming conversion of \$12.5 million principal amount and accrued interest of our 2017 convertible notes as of June 30, 2018 at a conversion price of \$5.00 per share and the conversion of \$33.8 million principal amount and accrued interest of our 2018 convertible notes as of June 30, 2018 at a conversion price of \$8.00 per share, the issuance of 9,000,000 shares of common stock in this offering, the issuance of 500,000 shares of common stock in this offering, the issuance of 500,000 shares of redeemable convertible preferred stock outstanding as of June 30, 2018 and no exercise of the underwriters' option to purchase additional shares and no exercise of options, there will be 36,573,353 shares of common stock upon the closing of this offering. As of June 30, 2018, assuming the conversion of all outstanding redeemable convertible preferred stock into common stock upon the closing of this offering, the conversion of our convertible notes, and the exercise of warrants, we had approximately 90 record holders of our common stock.

#### Voting Rights

Each share of common stock is entitled to one vote per share on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law or our certificate of incorporation. Our certificate of incorporation and bylaws to be in effect upon the completion of this offering do not provide for cumulative voting rights. Because of this, the holders of a plurality of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders.

#### Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. For more information see the section of this prospectus titled "Dividend Policy."

#### Liquidation

Upon a liquidation event, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

#### **Rights and Preferences**

Holders of common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

#### Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering, upon payment and delivery in accordance with the underwriting agreement, will be, fully paid and nonassessable.

#### Preferred Stock

Upon the closing of this offering, our board of directors will have the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action. Upon closing of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

#### Warrants

As of June 30, 2018, 500,000 shares of our Series B redeemable convertible preferred stock were issuable upon exercise of outstanding warrants to purchase shares of Series B redeemable convertible preferred stock with an exercise price of \$0.01 per share. Upon the conversion of the Series B redeemable convertible preferred stock, the warrants will convert to warrants to purchase 500,000 shares of common stock at an exercise price of \$0.01 per share. The warrants provide for the adjustment of the number of shares issuable upon the exercise of the warrants in the event of stock splits, recapitalizations, reclassifications and consolidations. We expect a portion of the outstanding warrants to be exercised immediately following the closing of this offering. The outstanding warrants will terminate as of August 11, 2022, if unexercised.

These warrants have a net exercise provision under which their holders may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of our stock at the time of exercise of the warrants after deduction of the aggregate exercise price. These warrants contain provisions for adjustment of the exercise price and number of shares issuable upon the exercise of warrants in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations.

#### **Registration Rights**

Under our investors' rights agreement, as amended, following the closing of this offering, the holders of approximately 12,385,154 shares of common stock issuable upon conversion of outstanding redeemable convertible preferred stock, or their transferees, have the right to require us to register the offer and sale of their shares, which we refer to as registration rights. Additionally, the holders of 500,000 shares of common stock

issuable upon exercise of warrants to purchase common stock, 2,497,722 shares of common stock issuable upon conversion of the 2017 convertible notes (assuming conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share) and 4,226,243 shares of common stock issuable upon conversion of the 2018 convertible notes (assuming conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$8.00 per share), or their transferees, have registration rights.

#### **Demand Registration Rights**

At any time after six months after the date of this prospectus, the holders of at least a majority of the shares having demand registration rights have the right to demand that we use best efforts to file a registration statement for the registration of the offer and sale of at least such number of shares with anticipated offering proceeds in excess of \$30 million. We are only obligated to file up to two registration statements in connection with the exercise of demand registration rights. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances and our ability to defer the filing of a registration statement with respect to an exercise of such demand registration rights for up to 180 days under certain circumstances.

#### Form S-3 Registration Rights

At any time after we are qualified to file a registration statement on Form S-3, a stockholder with registration rights has the right to demand that we file a registration statement on Form S-3 so long as the aggregate number of shares to be offered and sold under such registration statement on Form S-3 is at least \$10 million. We are not obligated to file any registration statements within 180 days of a registration statement that we propose. These investor registration rights are subject to specified conditions and limitations, including our ability to defer the filing of a registration statement with respect to an exercise of such Form S-3 registration rights for up to 180 days under certain circumstances.

#### Piggyback Registration Rights

At any time following the closing of this offering, if we propose to register the offer and sale of any of our securities under the Securities Act either for our own account or for the account of other stockholders, a stockholder with registration rights will have the right, subject to certain exceptions, to include their shares of common stock in the registration statement. These registration rights are subject to specified conditions and limitations, and any proposed offering in connection therewith may be terminated or withdrawn by us at our sole discretion.

#### **Expenses of Registration**

We will pay all expenses relating to any demand registrations, Form S-3 registrations and piggyback registrations, other than underwriting discounts and selling commissions.

#### Termination

The registration rights terminate upon the earlier of (1) the date that is three years after the closing of this offering and (2) as to a given holder of registration rights, when such holder of registration rights can sell all of such holder's registrable securities in a three month-period pursuant to Rule 144 promulgated under the Securities Act.

#### Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

#### Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a publicly held Delaware corporation from engaging in a "business combination" with any "interested stockholder"

for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which
  resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- · any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person who, together with the person's affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

#### Certificate of Incorporation and Bylaws

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

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may
  designate, including the right to approve an acquisition or other change in our control;
- provide that the authorized number of directors may be changed only by resolution of the board of directors, subject to the rights of any holders
  of preferred stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes, each of which stands for election once every three years;
- provide that a director may only be removed from the board of directors by the stockholders for cause;

- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a
  meeting of stockholders must provide notice in writing in a timely manner, and also meet specific requirements as to the form and content of a
  stockholder's notice;
- not provide for cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the board of directors, the chairman of the board of directors, our chief
  executive officer or president (in the absence of a chief executive officer);
- provide that stockholders will be permitted to amend certain provisions of our bylaws only upon receiving at least two-thirds of the votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class; and
- provide that, unless we otherwise consent in writing, a state or federal court located within the State of Delaware shall be the sole and exclusive
  forum for (1) any derivative action or proceeding brought on behalf of the company, (2) any action asserting a claim of breach of a fiduciary
  duty owed by any of our directors, officers or other employees to the company or our stockholders, (3) any action asserting a claim against the
  company arising pursuant to any provision of the Delaware General Corporation Law, or (4) any action asserting a claim against the company
  governed by the internal affairs doctrine.

The amendment of any of these provisions would require approval by the holders of at least two-thirds of our then outstanding common stock, voting as a single class.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is The Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, Massachusetts 02021.

#### Listing

Our common stock has been approved for quotation on the Nasdaq Global Market under the trading symbol "KOD."

## SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and although our common stock has been approved for listing on the Nasdaq Global Market, we cannot assure you that there will be an active public market for our common stock following this offering. We cannot predict what effect sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. Future sales of substantial amounts of common stock in the public market, including shares issued upon exercise of outstanding options or warrants, or the perception that such sales may occur, however, could adversely affect the market price of our common stock and also could adversely affect our future ability to raise capital through the sale of our common stock or other equity-related securities at times and prices we believe appropriate.

Upon completion of this offering, based on our shares outstanding as of June 30, 2018 and after giving effect to the conversion of all outstanding shares of our redeemable convertible preferred stock, conversion of our convertible notes (assuming conversion of \$12.5 million principal amount and accrued interest of our 2017 convertible notes as of June 30, 2018 at a conversion price of \$5.00 per share and the conversion of \$33.8 million principal amount and accrued interest of our 2018 convertible notes as of June 30, 2018 at a conversion price of \$8.00 per share) and the issuance of 500,000 shares of common stock issuable upon the exercise of warrants outstanding as of June 30, 2018, a portion of which are expected to be exercised immediately following the closing of this offering, 36,573,353 shares of our common stock will be outstanding, or 37,923,353 shares of common stock if the underwriters exercise their option to purchase additional shares in full. All of the shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless held by our "affiliates," as that term is defined in Rule 144. Restricted securities may be sold in the public market only if their offer and sale is registered under the Securities Act or if the offer and sale of those securities qualify for an exemption from registration, including exemptions provided by Rules 144 and 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements and market stand-off provisions described below and the provisions of Rules 144 or 701, and assuming no extension of the lock-up period and no exercise of the underwriters' option to purchase additional shares, the shares of our common stock that will be deemed "restricted securities" will be available for sale in the public market following the completion of this offering as follows:

- no shares will be eligible for sale on the date of this prospectus; and
- 27,573,353 shares will be eligible for sale upon expiration of the lock-up agreements and market stand-off provisions described below, beginning more than 180 days after the date of this prospectus.

We may issue shares of our common stock from time to time for a variety of corporate purposes, including in capital-raising activities through future public offerings or private placements, in connection with exercise of stock options or warrants, vesting of restricted stock units and other issuances relating to our employee benefit plans and as consideration for future acquisitions, investments or other purposes. The number of shares of our common stock that we may issue may be significant, depending on the events surrounding such issuances. In some cases, the shares we issue may be freely tradable without restriction or further registration under the Securities Act; in other cases, we may grant registration rights covering the shares issued in connection with these issuances, in which case the holders of our common stock will have the right, under certain circumstances, to cause us to register any resale of such shares to the public.

#### Lock-up Agreements and Market Standoff Provisions

We, our directors and officers and substantially all of the holders of our equity securities have agreed, subject to certain exceptions, not to offer, sell or transfer any common stock or securities convertible into or exchangeable or exercisable for common stock for 180 days after the date of this prospectus without first obtaining the written consent of Morgan Stanley & Co. LLC and Merrill Lynch, Pierce, Fenner & Smith

Incorporated, on behalf of the underwriters, or us, as applicable, after the date of this prospectus. Morgan Stanley & Co. LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated may, in their sole discretion, and subject to FINRA Rule 5131, release any of the securities subject to the lock-up agreements with the underwriters at any time. These agreements are described below under the section captioned "Underwriting."

#### Rule 144

In general, under Rule 144, beginning 90 days after the effective date of this prospectus, a person who is not our affiliate for purposes of the Securities Act and has not been our affiliate at any time during the preceding three months will be entitled to sell any shares of our common stock that such person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Sales of our common stock by any such person would be subject to the availability of current public information about us if the shares to be sold were beneficially owned by such person for less than one year.

In addition, under Rule 144, a person may sell shares of our common stock acquired from us immediately upon the completion of this offering, without regard to the registration requirements of the Securities Act or the availability of public information about us, if:

- · the person is not our affiliate and has not been our affiliate at any time during the preceding three months; and
- the person has beneficially owned the shares to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates.

Beginning 90 days after the date of this prospectus, our affiliates who have beneficially owned shares of our common stock for at least six months, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 365,734 shares immediately after this
  offering, assuming no exercise of the underwriters' option to purchase additional shares; 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 on Form 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. To the extent that shares were acquired from one of our affiliates, a person's holding period for the purpose of effecting a sale under Rule 144 would commence on the date of transfer from the affiliate.

#### Rule 701

In general, under Rule 701 a person who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been one of our affiliates during the immediately preceding 90 days may sell these shares in reliance upon Rule 144, but without being required to comply with the notice, manner of sale or public information requirements or volume limitation provisions of Rule 144. Rule 701 also permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required to wait until 90 days after the effective date of this prospectus before selling such shares pursuant to Rule 701.

As of June 30, 2018, there were 1,041,375 shares of our outstanding common stock issued in reliance on Rule 701 as a result of exercises of stock options. All of these shares, however, are subject to lock-up agreements or market stand-off provisions as discussed above, and, as a result, these shares will only become eligible for sale

at the earlier of the expiration of the lock-up period or upon obtaining the consent of Morgan Stanley & Co. LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated on behalf of the underwriters to release all or any portion of these shares from the lock-up agreements.

#### **Stock Options**

As of June 30, 2018, options to purchase an aggregate of 3,383,478 shares of our common stock were outstanding. We intend to file one or more registration statements on Form S-8 under the Securities Act to register the offer and sale of all shares of our common stock subject to outstanding stock options and all shares issued or issuable under our stock plans. We expect to file the registration statement covering these shares after the date of this prospectus, which will permit the resale of such shares by persons who are non-affiliates of ours in the public market without restriction under the Securities Act, subject, with respect to certain of the shares, to the provisions of the lock-up agreements and market stand-off provisions described above.

#### Warrants

Upon completion of this offering, a portion of the warrants to purchase an aggregate of 500,000 shares of our common stock at an exercise price of \$0.01 per share are expected to be exercised. See the section of this prospectus titled "Description of Capital Stock—Warrants" for additional information. Such shares issued upon exercise of the warrants may be able to be sold after the expiration of the lock-up period described above subject to the requirements of Rule 144 described above.

#### **Registration Rights**

Upon completion of this offering, the holders of approximately 19,609,119 shares of our common stock will be eligible to exercise certain rights to cause us to register their shares for resale under the Securities Act, subject to various conditions and limitations. These registration rights are described under the section of this prospectus titled "Description of Capital Stock—Registration Rights." Upon the effectiveness of a registration statement covering these shares, the shares would become freely tradable, and a large number of shares may be sold into the public market, which may adversely affect the market price of our common stock.

<sup>187</sup> 

#### MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a summary of the material U.S. federal income tax consequences of the ownership and disposition of our common stock acquired in this offering by a "non-U.S. holder" (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the United States Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought, and do not intend to seek, any ruling from the Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any non-U.S., state or local jurisdiction or under U.S. federal gift and estate tax rules, except to the limited extent set forth below. In addition, this discussion does not address tax considerations applicable to an investor's particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- · banks, insurance companies, regulated investment companies, real estate investment trusts or other financial institutions;
- persons subject to the alternative minimum tax or the tax on net investment income;
- · tax-exempt organizations;
- · pension plans and tax-qualified retirement plans;
- controlled foreign corporations, passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;
- · brokers or dealers in securities or currencies;
- · traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our capital stock (except to the extent specifically set forth below);
- · certain former citizens or long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment); or
- persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership, entity or arrangement classified as a partnership or flow-through entity for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership or other entity. A partner in a partnership or other such 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 such entity, as applicable.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal gift or estate tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

#### Non-U.S. Holder Defined

For purposes of this discussion, you are a "non-U.S. holder" if you are a beneficial owner of our common stock that, for U.S. federal income tax purposes, is not a partnership or:

- · an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States or any
  political subdivision thereof, or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (1) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (2) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

#### Distributions

As described in the section of this prospectus titled "Dividend Policy," we have never declared or paid cash dividends on our common stock, and we do not anticipate paying any dividends on our common stock following the completion of this offering. However, if we do make distributions on our common stock, those payments 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. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will constitute a return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock.

Subject to the discussions below on effectively connected income and Foreign Account Tax Compliance Act, or FATCA, withholding, any dividend paid to you generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. In order to receive a reduced treaty rate, you must provide the applicable withholding agent with an IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. A non-U.S. holder of shares of our common stock eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to the applicable withholding agent, either directly or through other intermediaries.

Dividends received by you that are treated as effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, such dividends are attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from the 30% U.S. federal withholding tax, subject to the discussion below on backup withholding and FATCA withholding. In order to obtain this exemption, you must provide the applicable withholding agent with a properly executed IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to U.S. federal withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. You should consult your tax advisor regarding the tax consequences of the ownership and disposition of our common stock, including any applicable tax treates that may provide for different rules.

#### Gain on Disposition of Common Stock

Subject to the discussion below regarding backup withholding and FATCA withholding, you generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an applicable income tax treaty so provides, the gain is
   attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or
- our common stock constitutes a United States real property interest by reason of our status as a "United States real property holding corporation," or USRPHC, for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is regularly traded on an established securities market, your common stock will be treated as U.S. real property interests only if you actually (directly or indirectly) or constructively hold more than five percent of such regularly traded common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

If you are a non-U.S. holder described in the first bullet above, you will be required to pay tax on the gain derived from the sale (net of certain deductions and credits) under regular graduated U.S. federal income tax rates, and a corporate non-U.S. holder described in the first bullet above also may be subject to the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be subject to tax at 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S. source capital losses for the year, provided you have timely filed U.S. federal income tax returns with respect to such losses. You should consult your tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

#### Federal Estate Tax

Our common stock beneficially owned by an individual who is not a citizen or resident of the United States (as defined for U.S. federal estate tax purposes) at the time of his or her death will generally be includable in the decedent's gross estate for U.S. federal estate tax purposes. Such stock, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax treaty provides otherwise.

#### **Backup Withholding and Information Reporting**

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address, and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on or of proceeds from the disposition of our common stock made to you may be subject to information reporting and backup withholding at a current rate of 24% unless you establish an exemption, for example, by properly certifying your non-U.S. status on a properly completed IRS Form W-8BEN

or W-8BEN-E or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding and information reporting may apply if the applicable withholding agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withhold. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

#### Foreign Account Tax Compliance Act (FATCA)

Provisions of the Code commonly referred to as FATCA, Treasury Regulations issued thereunder and official IRS guidance generally impose a U.S. federal withholding tax of 30% on dividends on, and the gross proceeds from a sale or other disposition of our common stock, paid to a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on, and the gross proceeds from, a sale or other disposition of our common stock paid to a "non-financial foreign entity" (as specially defined under these rules), unless such entity provides the withholding agent with a certification identifying the substantial direct and indirect U.S. owners of the entity, certifies that it does not have any substantial U.S. owners, or otherwise establishes an exemption.

The withholding obligations under FATCA generally apply to dividends on our common stock and under current transition rules are expected to apply to the payment of gross proceeds of a sale or other disposition of our common stock made on or after January 1, 2019. The withholding tax will apply regardless of whether the payment otherwise would be exempt from U.S. nonresident and backup withholding tax, including under the other exemptions described above. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Prospective investors are encouraged to consult with their own tax advisors regarding the application of FATCA withholding to their investment in, and ownership and disposition of, our common stock.

The preceding discussion of U.S. federal tax considerations is for general information only. It is not tax advice to investors in their particular circumstances. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed change in applicable laws.

## UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC and Merrill Lynch, Pierce, Fenner & Smith Incorporated are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

Name	Number of Shares
Morgan Stanley & Co. LLC	3,765,600
Merrill Lynch, Pierce, Fenner & Smith	
Incorporated	3,213,900
Barclays Capital Inc.	1,469,700
Chardan Capital Markets, LLC	550,800
Total	9,000,000

The underwriters and the representatives are collectively referred to as the "underwriters" and the "representatives," respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at a price that represents a concession not in excess of \$0.42 a share under the public offering price. After the initial public offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 1,350,000 additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions and estimated offering expenses payable by us. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions and estimated offering expenses payable by us, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional shares of common stock.

		Total		
	Per Share	No Exercise	Full Exercise	
Public offering price	\$ 10.00	\$90,000,000	\$103,500,000	
Underwriting discounts and commissions to be paid by us	\$ 0.70	\$ 6,300,000	\$ 7,245,000	
Proceeds, before expenses, to us	\$ 9.30	\$83,700,000	\$ 96,255,000	

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$3.6 million. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$35,000. The underwriters have agreed to reimburse us for certain documented out of pocket expenses incurred in connection with this offering.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

We have been approved to list our common stock on the Nasdaq Global Market under the trading symbol "KOD".

We and all directors and officers and the holders of substantially all of our outstanding equity securities have agreed that, without the prior written consent of the representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus, or the restricted period:

- 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, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock;
- file any registration statement with the Securities and Exchange Commission relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, each such person agrees that, without the prior written consent of the representatives on behalf of the underwriters, such person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

Subject to certain additional limitations relating to public filings required to be or voluntarily made in connection with a transfer, the restrictions described in the immediately preceding paragraph do not apply to:

- · the sale of shares to the underwriters;
- the issuance by us of shares of common stock upon the exercise of an option or a warrant or the conversion of a security outstanding on the date of this prospectus of which the representatives have been advised in writing;
- the issuance by us of options, restricted stock units or restricted stock awards (including the common stock issued upon the settlement or exercise thereof) pursuant to employee benefit plans described in this prospectus;
- the filing of a registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of the underwriting agreement and described in this prospectus;
- the issuance by us of securities in connection with certain acquisitions, joint ventures, and other strategic transactions; *provided* that the
  aggregate number of shares of common stock that we may sell or issue or agree to sell or issue pursuant to this provision may not exceed 5% of
  the total number of shares of common stock outstanding immediately following this offering, and we will cause each recipient of such
  securities to execute and deliver to the representatives, a lock-up agreement on substantially the same terms as described herein.
- · shares of common stock acquired in this offering or in open market transactions after the completion of the offering of the shares;
- transfers (1) by bona fide gift, will or intestate succession; (2) transfers to the transferor's immediate family members or to a trust formed for their benefit; (3) in the case of corporations or other business entities, transfers to certain affiliated business entities and the equityholders of the corporation or other business entity; or (4) in the case of a trust, to a trustee or beneficiary of the trust; provided that the recipient also executes a lock-up agreement;

- transfers relating to the "cashless" or "net" exercise of securities exercisable or convertible for common stock, where securities are surrendered to us to fulfill tax withholding obligations in connection with their exercise or conversion;
- the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of common stock, provided that such plan does not provide for the transfer of common stock during the restricted period;
- transfers to us in accordance with (1) our repurchase rights related to a transferor's employment or (2) rights of first refusal in our favor;
- · transfers pursuant to a qualified domestic order or divorce settlement; or
- transfers pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of the common stock involving a change in control.

The representatives, 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.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market levels or prevent or retard a decline in the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

#### **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 respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related

derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. 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 such securities and instruments.

## Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price were our future prospects and those of our industry in general, our results of operations and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

#### **Directed Share Program**

At our request, the underwriters have reserved 5% of the shares of common stock offered by this prospectus for sale, at the initial public offering price, to directors, officers, employees, business associates and other persons related to us. If purchased by these persons, these shares will not be subject to a lock-up restriction, except in the case of shares purchased by any director, executive officer or employee. The number of shares of common stock available for sale to the general public will be reduced to the extent these individuals purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered by this prospectus.

#### Purchases by Existing Securityholders or Their Affiliates

Investment entities affiliated with certain of our principal stockholders and certain of our other existing securityholders have agreed to purchase an aggregate of 5,750,000 shares of our common stock in this offering. The underwriters will receive the same underwriting discounts and commissions on any shares purchased by these investment entities as they will on any other shares sold to the public in this offering.

#### **Selling Restrictions**

#### European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of

sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

#### United Kingdom

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 ("FSMA") received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

#### Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

#### **Dubai International Financial Centre**

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid 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.

#### Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

#### Hong Kong

The shares of our common stock have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the shares of our common stock has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares of common stock 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.

#### Japan

The shares of our common stock 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.

#### 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 the shares of our common stock may not be circulated or distributed, nor may the shares of our common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (1) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (2) 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 (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of our common stock 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 shares of our common stock 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.

Solely for the purposes of its obligations pursuant to Section 309B of the SFA, we have determined, and hereby notify all relevant persons (as defined in the CMP Regulations 2018), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

#### Canada

The shares of our common stock 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 of our common stock 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.

<sup>198</sup> 

## LEGAL MATTERS

The validity of the shares of the common stock offered hereby will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California. Davis Polk & Wardwell LLP, Menlo Park, California, is acting as counsel for the underwriters.

#### EXPERTS

The financial statements as of December 31, 2016 and December 31, 2017 and for the years then ended included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

#### WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus constitutes only a part of the registration statement. Some items are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits. Statements contained in this prospectus concerning the contents of any contract or document referred to are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit.

You may obtain copies of this information by mail from the Public Reference Section of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549, at prescribed rates. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website at www.sec.gov that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at www.kodiak.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

## KODIAK SCIENCES INC. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets	F-3
Consolidated Statements of Operations and Comprehensive Loss	F-4
Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit	F-5
Consolidated Statements of Cash Flows	F-6
Notes to Consolidated Financial Statements	F-7

#### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Stockholders of Kodiak Sciences Inc.,

#### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Kodiak Sciences Inc. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders' deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

#### Substantial Doubt About the Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and negative cash flows from operating activities that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

#### **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/PricewaterhouseCoopers LLP San Jose, California April 30, 2018

We have served as the Company's auditor since 2016.

## Kodiak Sciences Inc.

# Consolidated Balance Sheets (in thousands, except per share and share amounts)

Assets	December 31, 2016						2018	June 30, 2018 Pro Forma (unaudited)	
Current assets:									
Cash and cash equivalents	\$	9,622	\$	1,395	\$	17,641	\$	17,641	
Prepaid expenses and other current assets		568		200		465		465	
Total current assets Restricted cash		10,190 140		1,595 140		18,106 140		18,106 140	
Property and equipment, net		1,776		1,509		1,303		1,303	
Deferred offering costs						2,154		2,154	
Other assets		8		—		_			
Total assets	\$	12,114	\$	3,244	\$	21,703	\$	21,703	
Liabilities, redeemable convertible preferred stock and stockholders' deficit									
Current liabilities:	¢		٩	2.254	¢	0.450	¢	0.450	
Accounts payable Accrued and other current liabilities	\$	1,074 1,434	\$	3,356 5,802	\$	2,472 2,017	\$	2,472 2,017	
Total current liabilities		2,508		9,158		4,489		4,489	
Convertible notes (includes \$7,937 and \$17,411 (unaudited) at December 31, 2017 and June		2,508		9,138		4,409		4,407	
30, 2018, respectively, due to related parties)		_		9,921		39,495		_	
Redeemable convertible preferred stock warrant liability (includes \$1,840 and \$3,204									
(unaudited) at December 31, 2017 and June 30, 2018, respectively, attributable to				2 200		1.005			
warrants held by related parties) Derivative instrument (includes \$2,134 (unaudited) at June 30, 2018, attributable to related		—		2,300		4,005		—	
parties)		_		_		7,367		_	
Capital lease obligation, noncurrent		103		53		19		19	
Other liabilities		569		533		538		538	
Total liabilities		3,180		21,965		55,913		5,046	
Commitments and contingencies (Note 7)									
Redeemable convertible preferred stock, \$0.0001 par value, 13,753,595 shares authorized at December 31, 2016 and 18,753,595 shares authorized at December 31, 2017 and June 30, 2018 (unaudited); 12,385,154 shares issued and outstanding at December 31, 2016 and 2017 and June 30, 2018 (unaudited); liquidation value of \$50,324 at December 31, 2016 and 2017 and June 30, 2018 (unaudited); no shares authorized, issued or outstanding, pro forma (unaudited)		50,017		50,017		50,017		_	
Stockholders' deficit:									
Common stock, \$0.0001 par value, 23,500,000 shares authorized at December 31, 2016 and 28,500,000 shares authorized at December 31, 2017 and June 30, 2018 (unaudited); 7,930,831, 7,936,434 and 7,964,234 (unaudited) shares issued and outstanding at December 31, 2016 and 2017 and June 30, 2018, respectively; 28,500,000 shares authorized and 27,073,353 shares issued and outstanding, pro forma (unaudited)		1		1		1		3	
Additional paid-in capital		303		584		1,424		109,404	
Accumulated deficit		(41,387)		(69,323)		(85,652)		(92,750)	
Total stockholders' deficit		(41,083)		(68,738)	_	(84,227)		16,657	
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	\$	12,114	\$	3,244	\$	21,703	\$	21,703	

The accompanying notes are an integral part of these consolidated financial statements.

#### Kodiak Sciences Inc.

#### Consolidated Statements of Operations and Comprehensive Loss (in thousands, except share and per share amounts)

Year Ended December 31, 2016 Year Ended Six Months Ended Six Months Ended June 30, 2017 June 30, 2018 December 31, 2017 (unaudited) (unaudited) Operating expenses Research and development \$ 14,053 22,022 10,098 7,233 \$ \$ \$ General and administrative 3,098 3,499 1,687 3,404 Total operating expenses 17,151 25,521 11,785 10,637 Loss from operations (17, 151)(25,521) (11,785)(10,637) Interest expense (includes \$914 and \$1,867 (unaudited) attributable to related parties for the year ended December 31, 2017 and six months (1, 185)ended June 30, 2018) (6) (12)(3, 347)Other income (expense), net (includes \$1,008 and \$1,585 (unaudited) other expense attributable to related parties for the year ended December 31, 2017 and six months ended June 30, 2018) 25 (1,230)14 (2,345)(16,329) Net loss and comprehensive loss (17, 132)\$ (27,936) (11,783)Net loss per share attributable to common stockholders, basic and diluted (3.72) (2.38)\$ (1.58)(2.11)\$ Weighted-average shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted 7,211,360 7,515,336 7,444,612 7,720,967 Pro forma net loss per share, basic and diluted (unaudited) \$ (1.21)\$ (0.40)Weighted-average shares outstanding used in computing pro forma net loss per share, basic and diluted (unaudited) 21,074,940 26,556,248

The accompanying notes are an integral part of these consolidated financial statements.

## **Kodiak Sciences Inc.**

## Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit (in thousands, except share amounts)

	Redeemable C Preferred Shares		Common Shares	Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
Balances at January 1, 2016	12,385,154	\$50,017	7,828,908	\$ 1	\$ 18	\$ (24,255)	\$ (24,236)
Stock issued through exercise of stock options	_	_	10,674	_	5		5
Vesting of early exercised stock options	—	_			12	—	12
Issuance of restricted stock awards	—		142,938	—		_	
Stock-based compensation expense	—		_	—	272	_	272
Repurchase of early exercised stock options	—		(51,689)	—	(4)		(4)
Net loss						(17,132)	(17,132)
Balances at December 31, 2016	12,385,154	50,017	7,930,831	1	303	(41,387)	(41,083)
Stock issued through exercise of stock options	—	—	5,603		3	_	3
Vesting of early exercised stock options	—		_	—	3	_	3
Stock-based compensation expense	_	_		—	275	—	275
Net loss						(27,936)	(27,936)
Balances at December 31, 2017	12,385,154	50,017	7,936,434	1	584	(69,323)	(68,738)
Stock issued through exercise of stock options							
(unaudited)	_	_	300	_	_	_	_
Issuance of restricted stock awards (unaudited)	_	_	27,500	_	_	_	_
Stock-based compensation expense (unaudited)	—	—	—	_	840	—	840
Net loss (unaudited)						(16,329)	(16,329)
Balances at June 30, 2018 (unaudited)	12,385,154	\$50,017	7,964,234	<u>\$ 1</u>	\$ 1,424	\$ (85,652)	\$ (84,227)

The accompanying notes are an integral part of these consolidated financial statements.

## Kodiak Sciences Inc. Consolidated Statements of Cash Flows (in thousands)

Cash Box from operating activitiesconstant operating activitiesCash and cash used in operating activitiesCash and cash used in operating activitiesAdjustments to recorcile fer loss to act cash used in operating activities2575-69224244Adjustments of the constraint loss of the discount2575-69214244and trasmere cord-1.161-3.333Change in fair value of federanable convertible prefered-1.260-1.705Change in fair value of discount isobilities2722753138749Other castes270368425(265)Other castes270368425(265)Other castes2322.2221.420(1345)Accessed and observent labilities2132.2221.420(1345)Accessed and observent labilities(16.047)(17.653)(7.752)(15.707)Purches of property and equipment(721)(209)(42)(438)Net cash used in operating activities(721)(209)(42)(438)Cash Box from financing activitiesPropered from issuance of operating activities-(16047)(17.653)(41)-Purches of properation of cast discount operating activitiesPurches of properations of the cast discount operating activitiesPayments for repurches of cast discount operating activiti			ar Ended ber 31, 2016	Year Ended December 31, 2017		Jun	onths Ended e 30, 2017 naudited)	Jun	onths Ended e 30, 2018 naudited)
Adjustments to recordel net loss to at cash used in operating activities $257$ $549$ $234$ $244$ Non-cash interest eners and montization of dobt discount $257$ $549$ $234$ $244$ Non-cash interest eners and montization of dobt discount $257$ $549$ $234$ $244$ Non-cash interest eners and montization of dobt discount $257$ $549$ $234$ $244$ Non-cash interest eners and montization of dobt discount $257$ $257$ $138$ $749$ Change in fair value of disruptive instrument $    764$ Stack-based compensation $272$ $2755$ $138$ $425$ $2655$ Negative space and other current lasets $270$ $368$ $425$ $2655$ Accounts payable $233$ $2,282$ $1,429$ $(1,845)$ Other labitities $244$ $4330$ $1,744$ $(4(485)$ Other labitities $(1,64)$ $448$ $23$ $222$ $(2,2)$ $(2,520)$ Net cash used in operating activities $(711)$ $(209)$ $(42)$ $(22)$ $(23)$ Net cash used in operating activities $(711)$ $(209)$ $(42)$ $(23)$ Cash flows from investing activities $(711)$ $(209)$ $(42)$ $(23)$ Net cash used in mixeting activities $(711)$ $(209)$ $(42)$ $(23)$ Cash flows from investing activities $(711)$ $(209)$ $(42)$ $(23)$ Net cash used in mixeting activities $(711)$ $(209)$ $(42)$ $(23)$ $(23)$ Net cash used in mixeting activities $(711)$ $(209)$ $(42)$ $(23)$ Net cash used in mixeting activities $(711)$ $(209)$ $(42)$ $(23)$ $(23)$ Net cash used in mixeting activities $(711)$ $(209)$ $(42)$ $(23)$ $(23)$ Net cash used in mixeting activities $(100)$ $ (10000$ $         -$	Cash flows from operating activities					,	,		,
activities:257549214244Non-cash interst express and amotization of dobt discountand issume cost-1.161-3.333Chage in fair value of variable convertible preferred-1.2001.705Change in fair value of variable convertible preferred-1.2001.705Change in fair value of variable convertible preferred-2722.7551.38749Change in fair value of variable convertible preferred2132.231.424(.465)Other assets2132.231.424(.468)Other assets1.104.481.23(.268)Other assets1.10(.10,44)(.468)1.23(.268)Other labilities(.16,047)(.17,655)(.7,762)(.15,707)Purchase of property and equipment(.10,11)(.10,11)(.10,11)(.10,11)Net cash used in openting activities(.16,047)(.17,655)(.7,762)(.15,707)Cash hows from flanking activities(.10,01)Purchase of any exercised stock options(.4)Proceed from issume of convertible notes (includes \$8,000Proceed from issume of convertible notes (includes \$8,000Proceed from issume of convertible notes (includes \$8,000		\$	(17,132)	\$	(27,936)	\$	(11,783)	\$	(16,329)
Non-each interiet expense and anothration of deb discourt and issume cost $-1,161$ $-$ 3,333 Change in fair value of feedemable conventible preferred $-1,161$ $-$ 1,260 $-$ 1,1705 Change in fair value of derivative instrument 272 275 138 T49 Change in sets shall hability: 272 375 138 T49 Change in sets shall hability: 272 375 138 Change in sets sets and liability: 272 322 242 1429 (1.1484) Change in sets sets and liability: 272 4.2 4.330 1,764 (4.085) Chan habitities (1.0077) Change in sets (1.00777) Change in sets	activities:		257		549		234		244
steck warrant liability         -         1.260         -         1.705           Change in fur value of derivative instrument         -         -         764           Stock-based compensation         272         275         1.38         749           Stock-based compensation         272         275         1.38         749           Other assets         213         2.232         1.249         (1.145)           Accounts payable         213         2.232         1.249         (1.145)           Net cash ased in operating activities         (116,047)         (17.655)         (7.762)         (15.707)           Cash flows from inscring activities         (771)         (209)         (42)         (38)           Net cash ased in investing activities         (771)         (209)         (42)         (38)           Cash flows from instancing activities         (771)         (209)         (42)         (38)           Net cash ased in investing activities         (771)         (209)         (42)         (38)           Deals or for maxing activities         (771)         (209)         (42)         (38)           Deals or for maxing activities         (771)         (209)         (42)         (38)           Dealson activi	Non-cash interest expense and amortization of debt discount								
Stuck-based compensation272275138749Changes in sexts and liabilities:270368425(.265)Prepaid expense and other current asets232.2821.429(.1345)Accounts payable232.2821.429(.1345)Accounts du other current liabilities2124.3301.764(.4085)Other liabilities(.141)-44-232.22(.1507)Cash flows from investing activities(.16077)(.17.655)(.7.762)(.15.707)Cash flows from investing activities(.771)(.209)(.42)(.38)Parthase of property and equipment(.771)(.209)(.42)(.38)Cash flows from financing activities(.711)(.209)(.42)(.38)Payments for repurchase of early exercised sequences(.40)Principal payments for repurchase of early exercised sequences(.62)(.977)(.41)(.49)Potter and December 31, 2017 and six months ended lune 30,(.160)-(.160)Debt issuance of common stock-(.160)(.120)9.637(.67)3.1.991Net cash equivalents and estricted cash, at enginitiesS9.7629.7629.7621.5351.731\$1.7.781Rescription of the searPrincipal payments of termin improvement allowance payable(.159)9.7629.7629.7621.535 <td< td=""><td></td><td></td><td>_</td><td></td><td>1,260</td><td></td><td>_</td><td></td><td>1,705</td></td<>			_		1,260		_		1,705
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Stock-based compensation		272		275		138		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Prepaid expense and other current assets								(265)
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									(1.845)
Other liabilities(14) $48$ $23$ $22$ Net cash used in operating activities(16,047)(17,655)(7,762)(15,707)Cash flows from investing activities(771)(209)(42)(38)Net cash used in investing activities(771)(209)(42)(38)Cash flows from financing activities(771)(209)(42)(38)Payments for repurchase of entry exercised stock options(4)Proceeds from sistance of convertible notes (includes \$8,000)and \$9,560 (numaticle) from teledic parties for the year-(181)-(140)Proceeds from sistance of common stock-(62)(97)(44)(44)(44)Principal payments of repairal lase(62)(97)(44)(54)Prince all of the year(120)9.657(87)31,991(17,626)(140)Principal payments of centant improvement allowance payable(5)3Net cash provided by (used in) financing activities(120)9.657(87)31,99116,246Cash, cash equivalents and restricted cash, at engining of period26,7009.7629.7629.7621,5351.871\$1.7781Reconcilation of cash, cash equivalents and restricted cash to statement of financial position\$9.762\$1.395\$1.871\$1.7781Supplemental cash flow information:\$9.762\$1.395<									
Cash flows from investing activities(771)(209)(42)(38)Purchase of property and equipment(771)(209)(42)(38)Cash flows from financing activities(771)(209)(42)(38)Proceeds from issuance of convertible notes (includes \$8,000(4)and \$2,560 (nuadited) from elited parties for the year-10,000-33,000Defining costs-(181)-(169)(41)Proceeds from issuance of convertible notes(62)(97)(44)(44)Principal payments of capital lease(62)(97)(44)(47)Net cash provide by (used in financing activities(120)9,637(87)31,991Net cash provide by (used in financing activities(120)9,637(87)31,991Net cash provide by (used in financing activities(16,938)(8,227)(7,991)16,246Cash, cash equivalents and restricted cash, at negting of period59,762\$1,535\$1,731\$17,781Reconciliation of cash, cash equivalents and restricted cash to statement of financial position\$9,762\$1,535\$1,731\$17,781Supplemental cash flow information:\$9,762\$1,535\$1,731\$17,781Reconciliation of cash, cash equivalents and restricted cash to statement of financial position\$9,762\$1,535\$1,731\$17,781Supplemental cash flow inform									
Purchase of property and equipment $(771)$ $(209)$ $(42)$ $(38)$ Net cash used in investing activities $(771)$ $(209)$ $(42)$ $(38)$ Cash flows from financing activities $(771)$ $(209)$ $(42)$ $(38)$ Payments for repurchase of early exercised stock options $(4)$ $  -$ Proceeds from issuance of convertible notes (includes \$8,000) $(4)$ $  -$ and Decentral fitting costs $    -$ 2018, respectively) $     -$ Defined of fitting costs $     -$ Principal payments of capital lease $(62)$ $(977)$ $(44)$ $(54)$ $(47)$ Principal payments of team timpovement allowance payable $(59)$ $(68)$ $(43)$ $(41)$ Principal payments of team timpovement allowance payable $(59)$ $(8227)$ $(7,891)$ $16,246$ cash equivalents and restricted cash, at end of period $5$ $1,535$ $5$ $1,871$ $5$ $17,781$ Reconciliation of cash, cash equivalents and restricted cash to statement of financial position $5$ $9,622$ $5$ $1,535$ $5$ $1,721$ $5$ $17,781$ Reconciliation of cash, cash equivalents and testricted cash to statement of financial position $5$ $9,762$ $5$ $1,535$ $5$ $1,721$ $5$ $17,781$ Reconciliation of cash, cash equivalents and testricted cash to statement of financial p	Net cash used in operating activities		(16,047)		(17,655)		(7,762)		(15,707)
Cash laws from financing activitiesImage: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and six months ended June 30, 2018, respectively)Image: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and six months ended June 30, 2018, respectively)Image: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and six months ended June 30, 2018, respectively)Image: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and six months ended June 30, 2018, respectively)Image: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and six months ended June 30, 2018, respectively)Image: convertible notes (includes \$8,000 and \$9,500 (maudited) from related parties for the year ended December 31, 2017 and \$1,000 and \$1			(771)		(209)		(42)		(38)
Payments for repurchase of early exercised stock options(4)Proceeds from issuance of convertible notes (includes \$8,000)2018, respectively)-10,000-33,0002018, respectively)0,000-33,000Deferred offering costs(181)-(140)Principal payments of capital lease(62)(97)(44)(54)(47)Principal payments of tenant improvement allowance payable(59)(88)(43)(47)Net cash provided by (used in financing activities(1120)9,637(87)31,991Net cash provided by (used in financing activities(16,938)(8,227)(7,891)16,246Cash, cash equivalents and restricted cash, at beginning of period26,7009,7629,7629,76215,335Cash, cash equivalents and restricted cash to statement of financial position\$ 9,622\$ 1,335\$ 1,731\$ 17,781Restricted cash\$ 140\$ 140\$ 140\$ 140Cash, cash equivalents and restricted cash to statement of financial position\$ 9,762\$ 1,535\$ 1,871\$ 17,781Supplemental cash flow information:\$ 9,762\$ 1,535\$ 1,871\$ 17,781\$ 17,781Supplemental cash now information:\$ 2,9762\$ 1,535\$ 1,871\$ 17,781Supplemental cash now information:\$ 2,266\$ 3,31\$ 1,731\$ 17,781Supplemental cash now information:\$ 2,266\$ 1,640\$ 140\$ 140Cas	e		(771)		(209)		(42)		(38)
ended December 31, 2017 and six months ended June 30, 2018, respectively) $-$ 10,000 $-$ 33,000 (768)Debt issuance cost $      (768)$ (768)Debt issuance cost $  (181)$ $ (164)$ $(44)$ Principal payments of capital lease $(62)$ $(97)$ $(44)$ $(43)$ $(47)$ Principal payments of canit improvement allowance payable $(59)$ $(88)$ $(43)$ $(47)$ Net cash provided by (used in) financing activities $(120)$ $9,637$ $(7,891)$ $16,246$ Cash, cash equivalents and restricted cash, at beginning of period $26,700$ $9,762$ $9,762$ $9,762$ $1,535$ Cash, cash equivalents and restricted cash, at end of period $$ 9,762$ $$ 1,535$ $$ 1,871$ $$ 17,781$ Reconcilitation of cash, cash equivalents $$ 9,622$ $$ 1,395$ $$ 1,731$ $$ 17,641$ Restricted cash $$ 140$ $$ 140$ $$ 140$ $$ 140$ $$ 140$ $$ 140$ $$ 140$ Cash and cash equivalents $$ 9,762$ $$ 1,535$ $$ 1,871$ $$ 17,781$ Supplemental cash flow information: $$ 9,762$ $$ 1,535$ $$ 1,731$ $$ 17,781$ Cash and cash equivalents and restricted cash to statement of $$ 140$ $$ 140$ $$ 140$ $$ 140$ $$ 140$ Cash and cash equivalents and restricted cash in statement of financial position $$ 9,762$ $$ 1,535$ $$ 1,731$ $$ 17,781$ Supplemental cash flow inform	Payments for repurchase of early exercised stock options		(4)		—		—		—
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	ended December 31, 2017 and six months ended June 30,		_		10 000		_		33 000
Principal payments of capital lease(62)(97)(44)(54)Proceeds from issuance of common stock53Principal payments of transmin improvement allowance payable(59)(88)(43)(47)Net cash provided by (used in) financing activities(120)9,637(87)31,991Net increase (decrease) in cash, cash equivalents and restricted cash as a tegrining of period(16,938)(8,227)(7,891)16,246Cash, cash equivalents and restricted cash, at beginning of period $\underline{S}$ 9,762 $\underline{9,762}$ 9,7621,535Cash, cash equivalents and restricted cash to statement of financial position $\underline{S}$ 9,622 $\underline{S}$ 1,395 $\underline{S}$ 1,731 $\underline{S}$ 17,641Restricted cash $\underline{S}$ 9,622 $\underline{S}$ 1,395 $\underline{S}$ 1,400 $\underline{S}$ 140 $\underline{S}$ 140Cash, cash equivalents $\underline{S}$ 9,762 $\underline{S}$ 1,535 $\underline{S}$ 1,731 $\underline{S}$ 17,641Restricted cash $\underline{S}$ 9,622 $\underline{S}$ 1,395 $\underline{S}$ 1,871 $\underline{S}$ 17,641Restricted cash $\underline{S}$ 9,762 $\underline{S}$ 1,535 $\underline{S}$ 1,871 $\underline{S}$ 17,781Supplemental cash flow information: $\underline{S}$ 9,762 $\underline{S}$ 1,535 $\underline{S}$ 1,871 $\underline{S}$ 17,781Supplemental cash flow information: $\underline{S}$			_				_		
Proceeds from issuance of common stockisisisisPrincipal payments of tenant improvement allowance payable(59)(88)(43)(47)Net increase (decrease) in cash, cash equivalents and restricted cash(16,938)(8,227)(7,891)16,246Cash, cash equivalents and restricted cash, at beginning of period(16,938)(8,227)(7,891)16,246Cash, cash equivalents and restricted cash, at end of period§9,7629,7629,7621,535Cash, cash equivalents and restricted cash to statement of financial position§9,622\$1,535\$1,7781Restricted cash\$9,6622\$1,395\$1,731\$17,641Restricted cash\$9,762\$1440\$1440\$1440Cash, cash equivalents and restricted cash to statement of financial position\$9,762\$1,731\$17,781Restricted cash\$9,762\$1,395\$1,731\$17,781Cash, cash equivalents and restricted cash in statement of financial position\$9,762\$1,535\$1,871\$17,781Supplemental cash flow information: cash paid for interest\$6\$24\$12\$13Supplemental cash flow information: reaction information:\$\$731\$-\$-\$Purchase of property and equipment under accounts payable and tenants improvement allowance pay			_		(181)		—		(140)
Principal payments of tenant improvement allowance payable(59)(88)(43)(47)Net cash provided by (used in) financing activities $(120)$ $9,637$ $(87)$ $31,991$ Net cash provided by (used in) financing activities $(16,938)$ $(8,227)$ $(7,891)$ $16,246$ Cash, cash equivalents and restricted cash, at beginning of period $26,700$ $9,762$ $9,762$ $9,762$ $9,762$ Cash, cash equivalents and restricted cash, at end of period $$ 9,762$ $$ 1,535$ $$ 1,731$ $$ 17,781$ Reconciliation of cash, cash equivalents and restricted cash to statement of financial position $$ 9,762$ $$ 140$ $$ 140$ $$ 140$ Cash and cash equivalents $$ 9,762$ $$ 1,395$ $$ 1,731$ $$ 17,641$ Restricted cash $$ 9,762$ $$ 140$ $$ 140$ $$ 140$ Cash, cash equivalents and restricted cash in statement of financial position $$ 9,762$ $$ 1,535$ $$ 1,731$ $$ 17,641$ Cash, cash equivalents and restricted cash in statement of financial position $$ 9,762$ $$ 140$ $$ 140$ $$ 140$ $$ 140$ Cash and cash equivalents and restricted cash in statement of financial position $$ 9,762$ $$ 1,535$ $$ 1,731$ $$ 17,781$ Supplemental cash flow information: $$ 26,700$ $$ 2,55$ $$ 1,535$ $$ 1,871$ $$ 17,781$ Supplemental disclosures of non-cash investing and financing information: $$ 2,66$ $$ 24$ $$ 12$ $$ 13$ Purchase of property and equipment under accounts payable and tenants improvement allowance payable							(44)		(54)
Net cash provided by (used in) financing activities $(120)$ $9,637$ $(87)$ $31,991$ Net increase (decrease) in cash, cash equivalents and restricted cash $(16,938)$ $(8,227)$ $(7,891)$ $16,246$ Cash, cash equivalents and restricted cash, at beginning of period $26,700$ $9,762$ $9,762$ $1,535$ Cash, cash equivalents and restricted cash, at end of period $$9,762$ $9,762$ $9,762$ $1,535$ Reconciliation of cash, cash equivalents and restricted cash to statement of financial position $$9,622$ $$1,395$ $$1,731$ $$17,781$ Restricted cash $$9,762$ $$1,400$ $$140$ $$140$ $$140$ $$140$ $$140$ Cash, cash equivalents and restricted cash in statement of financial position $$9,762$ $$1,535$ $$1,731$ $$$17,641$ Supplemental cash flow information: Cash paid for interest $$$6$ $$$24$ $$$12$ $$$1,771$ Supplemental disclosures of non-cash investing and financial information: Purchase of property and equipment under accounts payable and tenants improvement allowance payable $$731$ $$$$ $$$$ $$$$ $$$$ Redeemable convertible preferred stock warrant issued in connectible notes $$$$ $$$1,040$ $$$$ $$$$ $$$$ Issuance of derivative instrument related to convertible notes $$$$ $$$$ $$$$ $$$$ $$$$ $$$$ Issuance of derivative instrument related to convertible notes $$$$ $$$$ $$$$ $$$$ $$$$ $$$$ $$$$ <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>(42)</td> <td></td> <td>(47)</td>							(42)		(47)
Net increase (decrease) in cash, cash equivalents and restricted cash cash cash equivalents and restricted cash, at beginning of period $(16,938)$ $(8,227)$ $(7,891)$ $16,246$ Cash, cash equivalents and restricted cash, at end of period $\underline{\$}$ $9,762$ $9,762$ $9,762$ $1,535$ Cash, cash equivalents and restricted cash, at end of period $\underline{\$}$ $9,762$ $9,762$ $9,762$ $1,535$ Cash, cash equivalents and restricted cash to statement of financial position $\underline{\$}$ $140$ $\underline{\$}$ $140$ $\underline{\$}$ Cash and cash equivalents and restricted cash in statement of financial position $\underline{\$}$ $140$ $\underline{\$}$ $140$ $\underline{\$}$ $140$ $\underline{\$}$ $140$ Supplemental cash flow information: Cash paid for interest $\underline{\$}$ $6$ $\underline{\$}$ $24$ $\underline{\$}$ $12$ $\underline{\$}$ $13$ Supplemental disclosures of non-cash investing and financing information: Purchase of property and equipment under accounts payable and tenants improvement allowance payable 			()						
cash(16,938)(8,227)(7,891)16,246Cash, cash equivalents and restricted cash, at beginning of period $26,700$ $$ 9,762$ $9,762$ $$ 1,535$ $9,762$ $$ 1,535$ $9,762$ $$ 1,535$ $9,762$ $$ 1,535$ $9,762$ $$ 1,535$ $9,762$ $$ 1,535$ $9,762$ $$ 1,7781$ $9,762$ $$ 1,7781$ Reconciliation of cash, cash equivalents and restricted cash to statement of financial position $$ 9,762$ $$ 140$ $$ 1,535$ $$ 1,731$ $$ 1,7781$ $$ 17,641$ $$ 1400$ Cash, cash equivalents $$ 9,762$ $$ 1400$ $$ 1,400$ $$ 1400$ $$ 1400$ $$ 1400$ $$ 1400$ $$ 1400$ $$ 1400$ $$ 1400$ Cash, cash equivalents and restricted cash in statement of financial position $$ 9,762$ $$ 1400$ $$ 1,535$ $$ 1,731$ $$ 1,7781$ $$ 17,781$ Supplemental cash flow information: Cash paid for interest $$ 6$ $$ 6$ $$ 24$ $$ 120$ $$ 120$ $$ 120$ $$ 133$ Supplemental disclosures of non-cash investing and financing information: Purchase of property and equipment under accounts payable and tenants improvement allowance payable $$ 731$ $$ 731$ $$$ $$ 1,040$ $$$ $$$ $$ 1,040$ $$$ $$$ $$ 1,205$ Redeemable convertible notes payable ucash cord efferred offering costs $$$ $$$ $$$ $$ 1,205$ $$$ $$ 1,205$			(120)		9,037		(87)		31,991
period $26,700$ $9,762$ $9,762$ $9,762$ $9,762$ $9,762$ $1,535$ Cash, cash equivalents and restricted cash to statement of financial position $\$$ $9,762$ $\$$ $1,535$ $\$$ $1,771$ Cash and cash equivalents $\$$ $9,622$ $\$$ $1,395$ $\$$ $1,731$ $\$$ $17,781$ Cash and cash equivalents $\$$ $9,622$ $\$$ $1,395$ $\$$ $1,731$ $\$$ $17,641$ Restricted cash $\$$ $140$ $\$$ $140$ $\$$ $140$ $\$$ $140$ Cash and cash equivalents and restricted cash in statement of financial position $\$$ $9,762$ $\$$ $1,335$ $\$$ Supplemental cash flow information: Cash paid for interest $\$$ $6$ $\$$ $24$ $\$$ $12$ $\$$ $13$ Supplemental disclosures of non-cash investing and financing information: Purchase of property and equipment under accounts payable and tenants improvement allowance payable $\$$ $731$ $\$$ $$ $\$$ $$ $\$$ $-$ Redeemable convertible prefered stock warrant issued in connection with convertible notes $\$$ $$ $\$$ $1,040$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$ $$ $\$$	cash		(16,938)		(8,227)		(7,891)		16,246
Reconciliation of cash, cash equivalents and restricted cash to statement of financial position Cash, cash equivalents Restricted cash Cash, cash equivalents and restricted cash in statement of financial position Cash, cash equivalents and restricted cash in statement of financial position Cash, cash equivalents and restricted cash in statement of financial position Cash, cash equivalents and restricted cash in statement of financial position Cash paid for interest Cash paid fo			26,700		9,762		9,762		1,535
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		\$	9,762	\$	1,535	\$	1,871	\$	17,781
Restricted cash§140§140§140§140Cash, cash equivalents and restricted cash in statement of financial position§9,762§1,535§1,871§17,781Supplemental cash flow information: Cash paid for interest\$6\$24\$12\$13Supplemental cash flow information: Cash paid for interest\$6\$24\$12\$13Supplemental disclosures of non-cash investing and financing information: Purchase of property and equipment under accounts payable and tenants improvement allowance payable\$731\$-\$-\$-\$Acquisition of equipment through capital lease\$246\$73\$ <t< td=""><td>statement of financial position</td><td>¢</td><td>0.(22</td><td>¢</td><td>1 205</td><td>¢</td><td>1 721</td><td>¢</td><td>17 (41</td></t<>	statement of financial position	¢	0.(22	¢	1 205	¢	1 721	¢	17 (41
financial position§9,762§1,535§1,871§17,781Supplemental cash flow information:Cash paid for interest\$6\$24\$12\$13Supplemental disclosures of non-cash investing and financing information:Purchase of property and equipment under accounts payable and tenants improvement allowance payable\$731\$\$\$Acquisition of equipment through capital lease\$246\$73\$73\$\$Redeemable convertible preferred stock warrant issued in connection with convertible notes\$\$\$1,040\$\$\$Issuance of derivative instrument related to convertible notes payable\$\$\$\$\$6,603Unpaid deferred offering costs\$\$\$\$\$1,295	Restricted cash			\$ \$		\$ \$		\$ \$	
Cash paid for interest\$6\$24\$12\$13Supplemental disclosures of non-cash investing and financing information:Purchase of property and equipment under accounts payable and tenants improvement allowance payable\$731\$-\$-\$-Acquisition of equipment through capital lease\$246\$73\$-\$-\$-Redeemable convertible preferred stock warrant issued in connection with convertible notes\$-\$1,040\$-\$-\$Issuance of derivative instrument related to convertible notes\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$-\$\$\$-\$\$-\$\$\$-\$\$-\$\$\$-\$\$-\$\$\$-\$\$-\$\$\$-\$\$-\$\$\$-\$\$		\$	9,762	\$	1,535	\$	1,871	\$	17,781
financing information:       S         Purchase of property and equipment under accounts payable       \$       731       \$       -		\$	6	\$	24	\$	12	\$	13
financing information:       S         Purchase of property and equipment under accounts payable       \$       731       \$       -	Supplemental disclosures of non-cash investing and								
and tenants improvement allowance payable\$731\$-\$-\$-\$-Acquisition of equipment through capital lease\$246\$73\$73\$-Redemable convertible preferred stock warrant issued in connection with convertible notes\$-\$73\$73\$-Redemable convertible notes\$-\$\$1,040\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$-\$\$\$-\$\$\$-\$\$\$-\$\$-\$\$-\$\$-\$\$\$-\$									
Redeemable convertible preferred stock warrant issued in connection with convertible notes       \$       -       \$       1,040       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       -       \$       6,603       Unpaid deferred offering costs       \$       -       \$       -       \$       5       -       \$       1,295       \$       1,295       \$       -       \$       \$       1,295       \$       -       \$       \$       1,295       \$       -       \$       \$       \$       \$       1,295       \$ <td< td=""><td>and tenants improvement allowance payable</td><td></td><td>731</td><td></td><td>_</td><td></td><td>_</td><td></td><td>_</td></td<>	and tenants improvement allowance payable		731		_		_		_
connection with convertible notes\$-\$1,040\$-\$-Issuance of derivative instrument related to convertible notespayableDuppaid deferred offering costs\$-\$-\$\$-\$6,603Unpaid deferred offering costs\$-\$-\$-\$\$1,295		\$	246	\$	73	\$	73	\$	—
payable         \$         -         \$         -         \$         6,603           Unpaid deferred offering costs         \$         -         \$         -         \$         -         \$         6,603	connection with convertible notes	\$	_	\$	1,040	\$	_	\$	_
Unpaid deferred offering costs \$ - \$ - \$ 1,295		¢		¢		¢		¢	6 602
			_		_		_		
			—		—		—		

The accompanying notes are an integral part of these consolidated financial statements.

## Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements

#### 1. The Company

Kodiak Sciences Inc. (the "Company") was formed as a limited liability company on June 22, 2009 under the name Oligasis LLC. The Company changed its name and converted into a corporation which was incorporated in the state of Delaware on September 8, 2015. The Company is a clinical stage biopharmaceutical company specializing in novel therapeutics to treat high-prevalence ophthalmic diseases. The Company devotes substantially all of its time and efforts to performing research and development, raising capital and recruiting personnel.

The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry, including, but not limited to, development by competitors of new technological innovations, protection of proprietary technology, dependence on key personnel, contract manufacturer (Lonza) and contract research organization, compliance with government regulations and the need to obtain additional financing to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical studies and clinical trials and regulatory approval, prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance and reporting.

The Company's product candidates are in development. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained or maintained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from other pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees, consultants and other third parties.

The Company has incurred significant losses and negative cash flows from operations since inception and had an accumulated deficit of \$69.3 million as of December 31, 2017 and \$85.7 million (unaudited) as of June 30, 2018. The Company has historically financed its operations primarily through the sale of redeemable convertible preferred stock, convertible notes, and warrants to purchase Series B redeemable convertible preferred stock. To date, none of the Company's product candidates have been approved for sale and therefore the Company has not generated any revenue from product sales. Management expects operating losses to continue for the foreseeable future. The Company believes that its cash and cash equivalents as of December 31, 2017 and June 30, 2018, without any future financing, will not be sufficient for the Company to continue as a going concern for at least one year from the original issuance date of its annual consolidated financial statements for the year ended December 31, 2017 and interim consolidated financial statements for the period ended June 30, 2018, respectively. The Company believes that this raises substantial doubt about its ability to continue as a going concern.

As a result, the Company will be required to raise additional capital. If sufficient funds on acceptable terms are not available when needed, the Company could be required to significantly reduce its operating expenses and delay, reduce the scope of, or eliminate one or more of its development programs. Failure to manage discretionary spending or raise additional financing, as needed, may adversely impact the Company's ability to achieve its intended business objectives.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The consolidated financial statements do not reflect any adjustments relating to the recoverability and reclassifications of assets and liabilities that might be necessary if the Company is unable to continue as a going concern.

## Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

## 2. Summary of Significant Accounting Policies

#### **Basis of Presentation and Consolidation**

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

The consolidated financial statements include the Company's accounts and the accounts of Kodiak Sciences Financing Corporation, the Company's direct wholly owned subsidiary, incorporated in the United States, and Kodiak Sciences GmbH, the Company's indirect wholly owned subsidiary, incorporated in Switzerland. All intercompany accounts and transactions have been eliminated. The functional and reporting currency of the Company and its subsidiaries is the U.S. dollar.

#### Unaudited Interim Financial Information

The accompanying consolidated balance sheet as of June 30, 2018, the consolidated statements of operations and comprehensive loss and of cash flows for the six months ended June 30, 2017 and 2018, and the consolidated statement of redeemable convertible preferred stock and stockholders' deficit for the six months ended June 30, 2018 are unaudited. In the opinion of management, the unaudited data reflects all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of June 30, 2018 and the results of its operations and comprehensive loss and its cash flows for the six months ended June 30, 2017 and 2018. The financial data and other information disclosed in these notes related to the six months ended June 30, 2017 and 2018 are also unaudited. The results for the six months ended June 30, 2018 are not necessarily indicative of results to be expected for the year ending December 31, 2018, any other interim periods, or any future year or period.

#### **Unaudited Pro Forma Information**

The unaudited pro forma information as of June 30, 2018 has been prepared to give effect to (1) the automatic conversion of all of the outstanding redeemable convertible preferred stock of the Company on a one-to-one basis into 12,385,154 shares of common stock as of June 30, 2018; (2) the assumed conversion of the Company's outstanding 2017 convertible notes into 2,497,722 shares of redeemable convertible preferred stock, assuming the conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share, and the subsequent conversion to common stock on a one-to-one basis; (3) the automatic conversion of the Company's outstanding 2018 convertible notes into 4,226,243 shares of common stock, assuming the conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion of the 2018 convertible notes into 4,226,243 shares of common stock, assuming the derivative instrument upon the conversion of the 2018 convertible notes into impact to accumulated deficit as a result of the fair value adjustment to the derivative and loss on extinguishment of the 2018 convertible notes; (5) the automatic conversion of warrants to purchase 500,000 shares of redeemable convertible preferred stock for warrants to purchase 500,000 shares of common stock with exercise price of \$0.01 and the reclassification of the warrant liability of \$4.0 million to additional paid-in capital and (6) the filing of the Company's amended and restated certificate of incorporation, which will occur immediately prior to the completion of this offering. The unaudited pro forma information does not assume any proceeds from the planned initial public offering ("IPO").

The unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2017, has been computed to give effect to (1) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation to (a) affect the automatic conversion of the redeemable convertible preferred stock into shares of common stock, (b) reflect the 500,000 shares of common stock related to the redeemable convertible preferred stock warrants, and (c) reflect the 2,497,722 shares of common stock related to the 2017 convertible notes assuming the conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share, all as of January 1, 2017 or the date of issuance, if later, and (2) an

#### Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to (a) remove gains or losses resulting from the remeasurement of the redeemable convertible preferred stock warrant liability as the warrants will become exercisable for shares of common stock, and (b) remove the effect of the interest expense as it relates to the 2017 convertible notes. Common shares issuable upon exercise of the warrants are considered to be outstanding for unaudited pro forma basic and diluted net loss per share as they are issuable at little consideration.

The unaudited pro forma basic and diluted net loss per share for the six months ended June 30, 2018, has been computed to give effect to: (1) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation to (a) affect the automatic conversion of the redeemable convertible preferred stock into shares of common stock, (b) reflect the 500,000 shares of common stock related to the redeemable convertible preferred stock warrants and (c) reflect the 2,497,722 shares of common stock related to the 2017 convertible notes and 4,226,243 shares of common stock related to the 2018 convertible notes assuming the conversion of \$12.5 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share for the 2017 notes and the conversion of \$33.8 million principal amount and accrued interest as of June 30, 2018 at a conversion price of \$5.00 per share for the 2018 notes, all as of January 1, 2017 or the date of issuance, if later, and; (2) an adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to (a) remove gains or losses resulting from the remeasurement of the redeemable convertible preferred stock warrant liability as the warrants will become exercisable for shares of common stock, (b) remove the effect of the interest expense as it relates to the 2017 and 2018 convertible notes, and (c) remove losses resulting from the remeasurement of the derivative instrument related to convertible notes issued in 2018 as the underlying rights lapse in connection with the IPO. Common shares issuable upon exercise of the warrants are considered to be outstanding for unaudited pro forma basic and diluted net loss per share as they are issuable at little consideration.

#### Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities as of the date of the consolidated financial statements and expenses during the reporting period. Such estimates include the valuation of redeemable convertible preferred stock warrant liability, derivative instruments, deferred tax assets, useful lives of property and equipment, and stock-based compensation. Actual results could differ from those estimates.

#### Segments

The Company operates and manages its business as one reportable and operating segment, which is the business of research and development of drugs for ophthalmic diseases. The Company's chief executive officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for purposes of allocating resources and evaluating financial performance.

#### **Concentration of Credit Risk**

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents. All of the Company's cash and cash equivalents are held at one U.S. financial institution. Such deposits may, at times, exceed federally insured limits.

#### **Deferred Offering Costs**

Deferred offering costs, consisting of legal, accounting and other fees and costs relating to the Company's planned IPO, are recorded on the consolidated balance sheet. The deferred offering costs will be offset against the proceeds received upon the closing of the planned IPO. In the event the planned IPO is terminated, all of the

#### Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

deferred offering costs will be expensed within the Company's consolidated statements of operations and comprehensive loss. As of June 30, 2018, \$2.2 million (unaudited) of deferred offering costs were recorded on the consolidated balance sheet. There were no deferred offering costs capitalized as of December 31, 2017.

#### Cash and Cash Equivalents

The Company considers all highly liquid investments with stated maturities of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents include money market funds.

#### **Restricted Cash**

As of December 31, 2016 and 2017 and June 30, 2018 (unaudited), the Company had \$0.1 million of long-term restricted cash deposited with a financial institution. The entire amount is held in a separate bank account to support a letter of credit agreement related to the Company's headquarter facility lease which expires in 2023.

#### Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments consisting of cash and cash equivalents, accounts payable and accrued liabilities and other current liabilities, approximate fair value due to their relatively short maturities. The redeemable convertible preferred stock warrant liability and derivative instruments are carried at fair value based on unobservable market inputs.

#### Property and Equipment, Net

Property and equipment are stated at cost less accumulated depreciation for acquired assets. Depreciation is computed using the straight-line method over the estimated useful lives of assets, which is generally four years for laboratory equipment, three years for computer equipment and office equipment, five years for computer software and five to seven years for furniture and fixtures. Leasehold improvements are stated at cost and amortized over the shorter of the useful life of the assets or the length of the lease. Upon sale or retirement of assets, the costs and related accumulated depreciation are removed from the consolidated balance sheet and the resulting gain or loss is reflected in operations. Maintenance and repairs are charged to operations as incurred.

#### Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount to the future undiscounted net cash flows which the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the assets. There have been no such impairments of long-lived assets in the years ended December 31, 2016 and 2017 and six months ended June 30, 2017 and 2018 (unaudited).

#### **Redeemable Convertible Preferred Stock**

The Company records all shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in the event of certain events considered not solely within the Company's control, such as a merger, acquisition and sale of all or substantially all of the Company's assets (each, a "deemed liquidation event"), the redeemable convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. The Company has not adjusted the carrying values of the redeemable convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when a deemed liquidation event would occur that would

## Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

obligate the Company to pay the liquidation preferences to holders of shares of redeemable convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

## **Redeemable Convertible Preferred Stock Warrants**

The Company's redeemable convertible preferred stock warrants require liability classification and accounting as the underlying redeemable convertible preferred stock is considered contingently redeemable and may obligate the Company to transfer assets to the holders at a future date upon occurrence of a deemed liquidation event. The warrants are recorded at fair value upon issuance and are subject to remeasurement to fair value at each balance sheet date, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss. The Company will continue to adjust the warrant liability for changes in fair value until the earlier of the exercise or expiration of the redeemable convertible preferred stock warrants, occurrence of a deemed liquidation event or conversion of redeemable convertible preferred stock into common stock.

If all outstanding shares of the series of redeemable convertible preferred stock for which the redeemable convertible preferred stock warrants are exercisable are converted to shares of common stock or any other security in connection with a qualified initial public offering (a "Qualified IPO") or otherwise, then thereafter (a) the redeemable convertible preferred stock warrants shall become exercisable for such number of shares of common stock or such other security that each share of redeemable convertible preferred stock was converted into, multiplied by the number of shares subject to the redeemable convertible preferred stock warrants immediately prior to such conversion, and (b) the exercise price of the redeemable convertible preferred stock warrants shall automatically be adjusted to equal to the number of shares of common stock or such other security for which the redeemable convertible preferred stock warrants were exercisable immediately prior to such conversion by (2) the number of shares of common stock or such other security for which the redeemable convertible preferred stock warrants are exercisable immediately after such conversion. A Qualified IPO is the Company's first sale of common stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended, at a per share public offering price (prior to underwritter commissions and expenses) of at least \$10.00 (as adjusted for stock splits, combinations, dividends and the like) and that results in aggregate gross cash proceeds to the Company of an amount equal to or greater than \$75.0 million (before deduction of underwriting discounts, commissions and expenses).

#### **Derivative Instruments**

The convertible senior secured promissory notes issued in August 2017 ("2017 convertible notes") and convertible subordinated unsecured promissory notes issued in February 2018 ("2018 convertible notes") contain embedded features that provide the lenders with multiple settlement alternatives. Certain of these settlement features provide the lenders a right to a fixed number of the Company's shares upon conversion of the notes (the "conversion option"). Other settlement features provide the lenders the right or the obligation to receive cash or a variable number of shares upon the completion of a capital raising transaction, change of control or default of the Company (the "redemption features").

The conversion options of the 2017 convertible notes and 2018 convertible notes do not meet the requirements for separate accounting as an embedded derivative. However, the redemption features of the 2017 convertible notes meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument (the "2017 derivative instrument"). Similarly, the redemption features of the 2018 convertible notes meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument (the "2018 derivative instrument"). The derivative instruments are recorded at fair value at inception and are subject to remeasurement to fair value at each balance sheet date, with any changes in fair value recognized in the consolidated statements of operations and comprehensive loss (see Note 13).

#### **Kodiak Sciences Inc.**

#### Notes to Consolidated Financial Statements (Continued)

#### **Research and Development Expenses**

Costs related to research, design and development of products are charged to research and development expense as incurred. Research and development costs include, but are not limited to, payroll and personnel expenses, including stock-based compensation, laboratory supplies, outside services and allocated overhead, including rent, equipment, depreciation and utilities.

## Accrued Research and Development

The Company has entered into various agreements with contract research organizations ("CROs") and contract manufacturing organizations ("CMOs"). The Company's research and development accruals are estimated based on the level of services performed, progress of the studies, including the phase or completion of events, and contracted costs. The estimated costs of research and development provided, but not yet invoiced, are included in accrued liabilities and other current liabilities on the balance sheet. If the actual timing of the performance of services or the level of effort varies from the original estimates, the Company will adjust the accrual accordingly. Payments made to CROs or CMOs under these arrangements in advance of the performance of the related services are recorded as prepaid expenses and other current assets until the services are rendered.

#### Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with the provisions of Accounting Standards Codification ("ASC") 718, *Compensation-Stock Compensation*, which requires stock-based compensation cost to be measured at grant date, based on the fair value of the award. Prior to January 1, 2017, the fair value of the portion of the award that is ultimately expected to vest was recognized as expense over the requisite service periods in the Company's consolidated statements of operations and comprehensive loss. Upon the adoption of ASU 2016-09 for periods after January 1, 2017, the Company no longer records estimated forfeitures on share-based awards and, instead, has elected to record forfeitures as they occur.

The Company accounts for equity instruments issued to non-employees using a fair value approach. The fair value of stock options granted to non-employees is calculated at each grant date and remeasured at each reporting date using the Black-Scholes option pricing model.

#### Fair Value of Common Stock

The fair value of the Company's common stock is determined by the board of directors with assistance from management and external appraisers. Management's approach to estimate the fair value of the Company's common stock is consistent with the methods outlined in the American Institute of Certified Public Accountants' Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (the "Practice Aid"). Management considers several factors to estimate enterprise value, including significant milestones that would generally contribute to increases in the value of the common stock.

## Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires, among other things, that deferred income taxes be provided for temporary differences between the tax basis of the Company's assets and liabilities and their financial statement reported amounts. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses ("NOLs") and research and development credit carryforwards and are measured using the enacted tax rates and laws that will be in effect when such items are expected to reverse. A valuation allowance is provided against deferred tax assets unless it is more likely than not that they will be realized.

The Company accounts for uncertain tax positions by assessing all material positions taken in any assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial

#### Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit. To date, there have been no interest or penalties charged in relation to the unrecognized tax benefits.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to, (1) reducing the U.S. federal corporate tax rate from 35% to 21%; (2) requiring companies to pay a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries; (3) generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; (4) requiring a current inclusion in U.S. federal taxable income of certain earnings of controlled foreign corporations; (5) eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be realized; (6) creating the base erosion anti-abuse tax ("BEAT"), a new minimum tax; (7) creating a new limitation on deductible interest expense; and (8) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

#### Comprehensive Income (Loss)

Comprehensive income (loss) is defined as a change in equity of a business enterprise during a period, resulting from transactions from non-owner sources. There have been no items qualifying as other comprehensive income (loss) and, therefore, for all periods presented, the Company's comprehensive loss was the same as its reported net loss.

#### Net Loss per Share Attributable to Common Stockholders

Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common stock outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, the redeemable convertible preferred stock, redeemable convertible notes, common stock subject to repurchase, and stock options are considered to be potentially dilutive securities. Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities as the redeemable convertible preferred stock is considered a participating security. The Company's participating securities do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per common share is the same as basic net loss per common share for those periods.

#### **Recent Accounting Pronouncements**

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") under its accounting standard codifications ("ASC") or other standard setting bodies and adopted by the Company as of the specified effective date, unless otherwise discussed below.

## Recently Adopted Accounting Pronouncements

In May 2017, FASB issued ASU 2017-09, Compensation-Stock Compensation (Topic 718), Scope of Modification Accounting. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The amendments in this update are effective for all entities for annual periods, and interim periods within those annual periods, beginning after

## Kodiak Sciences Inc.

## Notes to Consolidated Financial Statements (Continued)

December 15, 2017. Early adoption is permitted. The Company adopted this new guidance beginning January 1, 2018, on prospective basis, which did not result in a material impact on its financial statements and related disclosures.

In November 2016, FASB issued ASU 2016-18, Restricted Cash. The amendments of this standard provide guidance on restricted cash disclosures and presentation in the statement of cash flows. This guidance is effective for interim and annual periods beginning after December 15, 2017.

The Company adopted ASU 2016-18 effective January 1, 2018, which required the change in restricted cash to be included as part of the total change in cash and cash equivalents on the statement of cash flows. While restricted cash is still presented as a separate line item in the Company's balance sheet, it will no longer be presented as a separate item in the statements of cash flows. ASU 2016-18 also required a restatement of the statements of cash flows in the prior period presented. The Company retroactively adjusted the statements of cash flows for the years ended December 31, 2016 and 2017 to show the combined result of cash and cash equivalents and restricted cash as follows:

		Year ended December 31, 2016						
	As previously reported		Adoption of ASU 2016-18		As	s reported		
Cash flows from investing activities								
Change in restricted cash	\$	140	\$	(140)	\$	_		
Net cash used in investing activities		(911)		140		(771)		
Cash and cash equivalents and restricted cash, at end of period	\$	9,622	\$	140	\$	9,762		

		Year ended December 31, 2017					
	As pr	reviously	Adopti	Adoption of ASU			
	rep	reported		2016-18		reported	
Cash and cash equivalents and restricted cash, at beginning of period	\$	9,622	\$	140	\$	9,762	
Cash and cash equivalents and restricted cash, at end of period	\$	1,395	\$	140	\$	1,535	

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfer of Assets Other than Inventory*, which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. ASU 2016-16 is effective for interim and annual periods beginning after December 15, 2017, with early adoption permitted. The Company adopted this new guidance beginning January 1, 2018, which did not result in a material impact on its financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which requires changes to how cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments in this update is effective for interim and annual periods beginning after December 15, 2017. The Company adopted this new guidance beginning January 1, 2018, on a retrospective basis, which did not result in a material impact on its financial statements and related disclosures.

In March 2016, FASB issued ASU 2016-09, *Stock Compensation—Improvements to Employee Share-Based Payment Accounting*. On January 1, 2017, the Company adopted the amendments to ASC 718, which simplify accounting for share-based payment transactions. Prior to this amendment, excess tax benefits resulting from the difference between the deduction for tax purposes and the compensation costs recognized for financial reporting were not recognized until the deduction reduced taxes payable. Under the new method, the Company recognizes excess tax benefits in the current accounting period. In addition, prior to January 1, 2017, the employee share-based compensation expense was recorded net of estimated forfeiture rates and subsequently adjusted at the

## Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

vesting date, as appropriate. As part of the amendment, the Company has stopped estimating forfeitures and elected to recognize the actual forfeitures by reducing the employee share-based compensation expense in the same period as the forfeitures occur. The Company has adopted these changes in accounting method using the modified retrospective method under which the Company should recognize the cumulative effect adjustment to the opening accumulated deficit as of January 1, 2017. The cumulative effect of the changes as of January 1, 2017 for the adoption of ASU 2016-09 was immaterial. Hence, the Company did not recognize the cumulative effect adjustment in its consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments—Overall: Recognition and Measurement of Financial Assets and Financial Liabilities.* The updated guidance enhances the reporting model for financial instruments, which includes amendments to address aspects of recognition, measurement, presentation and disclosure. The amendment to the standard is effective for financial statements issued for interim and annual periods beginning after December 15, 2017. The Company adopted this new guidance beginning January 1, 2018, on a retrospective basis, which did not result in a material impact on its financial statements and related disclosures.

#### New Accounting Pronouncements Not Yet Adopted

In June 2018, the FASB issued Accounting Standards Update ("ASU") 2018-07, *Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which expands the scope of Topic 718 to include all share-based payment transactions for acquiring goods and services from nonemployees. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which the grantor acquires goods and services to be used or consumed in its own operations by issuing share-based payment awards. ASU 2018-07 also clarifies that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under ASC 606. The transition method provided by ASU 2018-07 is a modified retrospective basis which recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The amendments in ASU 2018-07 are effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company is currently evaluating the impact of adopting this guidance on its consolidated financial statements and related disclosures.

In July 2017, FASB issued ASU 2017-11, *Earnings Per Share (Topic 260) Distinguishing Liabilities from Equity (Topic 480) Derivatives and Hedging (Topic 815) (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception.* This update simplifies the accounting for certain financial instruments with down round features, a provision in an equity-linked financial instrument (or embedded feature) that provides a downward adjustment of the current exercise price based on the price of future equity offerings. Down round features are common in warrants, preferred shares, and convertible debt instruments issued by private companies and early-stage public companies. This update requires companies to disregard the down round feature when assessing whether the instrument is indexed to its own stock, for purposes of determining liability or equity classification. The provisions of this update related to down rounds are effective for public entities for fiscal years and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. The amendments in Part I should be applied (1) retrospectively to outstanding financial instruments with a down round feature by means of a cumulative-effect adjustment to the statement of financial position as of the beginning of the first fiscal year and interim periods; (2) retrospectively to outstanding financial instruments with a down round feature for each prior reporting period presented. The Company is currently evaluating the impact the adoption of this standard will have on its consolidated financial statements and related disclosures.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

In February 2016, the FASB issued ASU 2016-02, *Leases* ("ASC 842"), which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). 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 today. ASC 842 supersedes the previous leases standard, ASC 840 *Leases*. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, an update which provides another transition method in addition to the existing modified retrospective transition method by allowing entities to initially apply the new lease standard is effective for interim and annual periods beginning after December 15, 2018 and should be applied through a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, and early adoption is permitted. The Company is currently evaluating the impact of adopting ASU 2016-02 on its consolidated financial statements and related disclosures.

#### 3. Property and Equipment, net

Property and equipment, net consists of the following (in thousands):

	ember 31, 2016	Dec	ember 31, 2017	 une 30, 2018 audited)
Leasehold improvement	\$ 1,260	\$	1,260	\$ 1,260
Laboratory equipment	945		1,174	1,207
Computer equipment	52		52	52
Computer software	139		173	178
Furniture and fixtures	206		225	225
Office equipment	79		79	79
Total property and equipment	 2,681		2,963	 3,001
Less: Accumulated depreciation	(905)		(1,454)	(1,698)
Property and equipment, net	\$ 1,776	\$	1,509	\$ 1,303

All long-lived assets are maintained in the United States. Depreciation expense, including depreciation of assets under capital leases, was \$0.3 million and \$0.5 million for the years ended December 31, 2016 and 2017 and \$0.2 million (unaudited) and \$0.2 million (unaudited) for the six months ended June 30, 2017 and 2018, respectively. As of December 31, 2016 and 2017, laboratory equipment included \$0.2 million and \$0.3 million of equipment acquired under capital leases, respectively, for which depreciation was less than \$0.1 million for the years ended December 31, 2016 and 2017. As of June 30, 2018, laboratory equipment included \$0.3 million (unaudited) of equipment acquired under capital leases, for which depreciation was less than \$0.1 million (unaudited) for the six months ended June 30, 2018.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

# 4. Accrued Liabilities and Other Current Liabilities

Accrued liabilities and other current liabilities consist of the following (in thousands):

	December 31, 2016	December 31, 2017	June 30, <u>2018</u> (unaudited)
Accrued research and development	\$ 626	\$ 4,293	\$ 546
Accrued salaries and benefits	501	1,129	752
Accrued professional fees	80	19	358
Accrued legal fees	17	35	171
Tenant improvement allowance payable	84	80	55
Capital lease payable	82	108	88
Accrued other liabilities	44	138	47
Total accrued and other current liabilities	\$ 1,434	\$ 5,802	\$ 2,017

# 5. Fair Value Measurements

The Company applies fair value accounting for all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. Fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, a three-tier fair value hierarchy has been established, which prioritizes the inputs used in measuring fair value as follows:

Level 1-Observable inputs, such as quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

*Level 3*—Unobservable inputs which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

The following tables present the Company's fair value hierarchy for assets and liabilities measured at fair value on a recurring basis (in thousands):

	]	Fair Value Measurements at December 31, 2016		
	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs _(Level 2)_	Significant Unobservable Inputs (Level 3)	Total
Assets: Money market funds Total	\$ 9,441 \$ 9,441	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$9,441</u> <u>\$9,441</u>

# Kodiak Sciences Inc.

# Notes to Consolidated Financial Statements (Continued)

There was no liability measured at fair value on a recurring and non-recurring basis as of December 31, 2016.

	Fa	ir Value Measuremen	ts at December 31, 2017	
	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets: Money market funds	\$ 1,217	s —	s —	\$1,217
Total	\$ 1,217	<u> </u>	<u>*</u>	<u>\$1,217</u> \$1,217
Liabilities:	<u>+</u>	<u> </u>	<u>*</u>	<u>+-;</u>
Redeemable convertible preferred stock warrant liability	\$ —	\$ —	\$ 2,300	\$2,300
Total	\$	\$ —	\$ 2,300	\$2,300
	 Fair Va	alue Measurements at	June 30, 2018 (unaudite	d)
	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	<u>\$ 17,490</u>	<u>s                                    </u>	<u>\$                                    </u>	<u>\$17,490</u>
Total	<u>\$ 17,490</u>	<u>\$                                    </u>	<u>\$</u>	\$17,490
Liabilities: Redeemable convertible preferred stock warrant liability 2018 derivative instrument Total	<u>s                                    </u>	\$ — <u>\$ —</u> \$ —	\$ 4,005 \$ 7,367 \$ 11,372	\$ 4,005 <u>\$ 7,367</u> \$11,372

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial instruments (in thousands):

	Redeemable	
	Convertible	
	Preferred	
	Stock	2018 Derivative
	Warrant	Instrument
	Liability	Liability
Fair value as of December 31, 2016	\$ —	\$ —
Issuance of financial instruments	1,040	—
Change in fair value included in other income (expense), net	1,260	
Fair value as of December 31, 2017	\$ 2,300	\$ —
Issuance of financial instruments (unaudited)		6,603
Change in fair value included in other income (expense), net (unaudited)	1,705	764
Fair value as of June 30, 2018 (unaudited)	\$ 4,005	\$ 7,367

The estimated fair value of the 2017 convertible notes (Level 3 instrument for disclosure purposes) was \$19.0 million as of December 31, 2017 and \$22.4 million (unaudited) as of June 30, 2018.

# Kodiak Sciences Inc.

# Notes to Consolidated Financial Statements (Continued)

The estimated fair value of the 2018 convertible notes (Level 3 instrument for disclosure purposes) was \$42.3 million (unaudited) as of June 30, 2018.

The Company used a hybrid method between the probability-weighted expected return method ("PWERM") and the Black-Scholes option pricing model ("OPM") to estimate the fair value of the warrants, 2017 and 2018 convertible notes and derivative instruments. The PWERM is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to the Company, as well as the economic and control rights of each share class. Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the preferred and common stock are inferred by analyzing these options.

The Company estimated the probability-weighted value across multiple scenarios, using the OPM to estimate the allocation of value within one of or more of those scenarios. In this valuation, the Company considered two possible outcomes under PWERM: (1) an IPO and (2) continued operations as a private company scenario, which is modeled using the OPM. For the IPO scenario, the fair value of the Company's common stock is consistent with the methods outlined in the Practice Aid. Estimates of fair value using valuation the OPM are affected by assumptions regarding a number of complex variables, including expected term, expected volatility, expected dividend, and risk-free interest rate. The Company considered as inputs to the PWERM the probability of occurrence of an IPO, the enterprise value and the discount rate, which is a blended rate that reflects the risk associated with the business during the forecasted period. Specifically, at December 31, 2017, the fair values recognized for the warrants and the derivative instruments, and for disclosure purposes of the fair value of convertible notes, assumed a discount rate of 57.5%, volatility of 75%, a risk free rate of 1.97%, no dividends expected to be paid, and an expected term based on the timing for the IPO scenario and the private scenario. At June 30, 2018, the fair values recognized for the warrants and for disclosure purposes of the fair value of convertible notes, assumed a discount rate of 55.0% (unaudited), volatility of 70.0% (unaudited), a risk free rate of 2.57% (unaudited), no dividends expected to be paid (unaudited), and an expected term based on the timing for the derivative instruments considered term based on the timing of occurrence of the underlying events of 0.25 to 1.0 years and assumed a discount rate of 40%.

#### 6. Convertible Notes

In August 2017, the Company received \$10.0 million in gross proceeds from the issuance of the 2017 convertible notes and warrants to purchase Series B redeemable convertible preferred stock (Note 12). Of this, \$8.0 million aggregate principal amount of the 2017 convertible notes were issued to related parties. Interest on the unpaid principal balance of the 2017 convertible notes accrues and compounds monthly from October 1, 2017 at a rate of 2.5% per month and is payable at maturity. Unless converted or redeemed upon occurrence of certain events, the 2017 convertible notes mature on December 1, 2020. The 2017 convertible notes include embedded derivatives that are required to be bifurcated and accounted for separately as a single, compound derivative instrument. The estimated fair value of 2017 derivative instrument was immaterial as of the issuance date and December 31, 2017 and June 30, 2018 (unaudited), due to the probability of occurrence of the underlying events being remote.

The Company's obligations with respect to the 2017 convertible notes are secured by all of its tangible and intangible assets. The 2017 convertible notes include covenants that restrict Company's ability to issue capital stock, repurchase or redeem capital stock, dispose of assets, incur debt, incur liens and make distributions to stockholders, including dividends. The 2017 convertible notes have customary events of default.

After January 31, 2018, each holder of 2017 convertible notes may at any time, at its option, elect to convert the principal amount and accrued interest of such convertible notes into shares of Series B redeemable convertible preferred stock at a price of \$5.00 per share. Upon the consummation of an IPO, the 2017 convertible

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

notes' outstanding principal balance and accrued but unpaid interest will be repaid, unless the holder elects, at its option, to convert the notes into shares of common stock issued in such IPO at a conversion price equal to the issuance price of common stock issued in such IPO.

The discount on 2017 convertible notes will be amortized over the contractual period of 3.31 years, using the effective interest rate method. The 2017 convertible notes have an annual effective interest rate of 38.18% per year. The 2017 convertible notes interest expense for the year ended December 31, 2017 was \$1.1 million, consisting of \$0.8 million of contractual interest expense and \$0.3 million of debt discount and issuance costs amortization. The 2017 convertible notes interest expense for the six months ended June 30, 2018 was \$1.7 million (unaudited), consisting of \$1.7 million (unaudited) of contractual interest expense and less than \$0.1 million (unaudited) of debt discount and issuance costs

As additional consideration for the notes, the Company issued warrants to purchase an aggregate of 500,000 shares of Series B redeemable convertible preferred stock at the exercise price of \$0.01, as adjusted for any stock splits, stock dividends, recapitalizations, reclassifications, combinations or similar transactions.

Future principal repayments of the 2017 convertible notes are as follows (in thousands):

	As of	As of
	December 31, 2017	June 30, 2018
Year ended December 31, 2020	\$ 10,000	\$ 10,000
Total	\$ 10,000	\$ 10,000
Less: unamortized balance of debt discount	(848)	(791)
Convertible note balance, net of discount	9,152	9,209
Accrued interest	769	2,489
Total balance	<u>\$ 9,921</u>	<u>\$ 11,698</u>

In February 2018, the Company received \$33.0 million in gross proceeds from the issuance of 2018 convertible notes, of which the Company issued \$31.2 million aggregate principal amount on February 2, 2018 ("first tranche") and \$1.8 million aggregate principal amount on February 23, 2018 ("second tranche"). Of this, \$9.6 million were issued to related parties. Interest on the unpaid principal balance of the 2018 convertible notes accrues from the date of issuance, and compounds monthly from February 28, 2018 at a rate of 6.0% per year and is payable at maturity. Unless converted, the 2018 convertible notes mature on the earlier of (1) December 1, 2020 and (2) the date of the consummation of a change of control. The 2018 convertible notes include embedded derivatives that are required to be bifurcated and accounted for separately as a single, compound derivative instrument. The estimated fair value of 2018 derivative instrument was \$6.6 million as of the issuance date and \$7.4 million (unaudited) as of June 30, 2018.

The discount on 2018 convertible notes for the first and second tranche will be amortized over the contractual period of 2.83 years and 2.77 years, respectively, using the effective interest rate method. The 2018 convertible notes have an annual effective interest rate of 15.10% per year for the first tranche and 15.45% per year for the second tranche. The 2018 convertible notes interest expense for the six months ended June 30, 2018 was \$1.5 million (unaudited), consisting of \$0.8 million (unaudited) of contractual interest expense and \$0.7 million (unaudited) of debt discount and issuance costs amortization.

The Company's obligations with respect to the 2018 convertible notes are unsecured and subordinated to its obligations with respect to the 2017 convertible notes. The 2018 convertible notes include covenants that restrict the Company's ability to issue capital stock, repurchase or redeem capital stock, dispose of assets, incur debt, incur liens and make distributions to stockholders, including dividends. The 2018 convertible notes have customary events of default.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

The 2018 convertible notes will automatically convert into shares of the Company's common stock at a price equal to (1) 80% of the initial price to public in a qualified initial public offering if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public in a qualified initial public offering if such offering is completed on or after February 2, 2019. A qualified initial public offering for the purposes of the 2018 convertible notes is one in which the Company generates aggregate gross proceeds of at least \$75.0 million or all of the 2017 convertible notes convert into shares of the Company's common stock. In connection with an offering that does not constitute a qualified initial public offering, each holder of 2018 convertible notes may, at its option, elect to convert the principal amount and accrued interest of such convertible notes into shares of common stock at a price equal to (1) 80% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public if such offering is completed prior to February 2, 2019 and (2) 75% of the initia

Future principal repayments of the 2018 convertible notes are as follows (in thousands):

		As of
	Jur	ne 30, 2018
Year ended December 31, 2020	\$	33,000
Total	\$	33,000
Less: unamortized balance of debt discount		(6,012)
Convertible note balance, net of discount		26,988
Accrued interest		809
Total balance	\$	27,797

The 2017 and 2018 convertible notes contain a clause in which failure to communicate to the lender any material adverse change or effect on the business, condition, operations, or ability to perform obligations under the terms of the 2017 and 2018 notes is considered an event of default.

#### 7. Commitments and Contingencies

# Leases

In January 2013, the Company executed a non-cancellable lease agreement for office and laboratory space in Palo Alto, California. The lease began in October 2013 and would expire in October 2018. In March 2016, the Company executed a lease amendment agreement which was effective March 2016 and extended the lease term until October 2023.

The Company recognizes rent expense on a straight-line basis over the lease period. Rent expense for the years ended December 31, 2016 and 2017 for these facilities was \$0.5 million and \$0.6 million, respectively. Rent expense for the six months ended June 30, 2017 and 2018 (unaudited) for these facilities was \$0.3 million.

# Capital Lease

On March 22, 2016, the Company executed a lease agreement with GE HFS LLC for laboratory equipment. The lease was recognized as a capital lease for laboratory equipment of \$0.2 million. The agreement began on March 31, 2016 and will expire on March 30, 2019 and consists of 36 equal monthly payments.

On January 30, 2017, the Company executed a lease agreement with GE HFS LLC for laboratory equipment. The lease was recognized as a capital lease for laboratory equipment of \$0.1 million. The agreement began on March 27, 2017 and will expire on March 26, 2020 and consists of 33 equal monthly payments starting June 2017.

At December 31, 2016 and 2017, capital lease liability of \$0.1 million was included in accrued and other current liabilities and \$0.1 million was included in capital lease obligation, noncurrent. At June 30, 2018, capital

# Kodiak Sciences Inc. Notes to Consolidated Financial Statements (Continued)

lease liability of \$0.1 million (unaudited) was included in accrued and other current liabilities and less than \$0.1 million (unaudited) was included in capital lease obligation, noncurrent.

The following table summarizes the Company's future minimum commitments under non-cancelable contracts (in thousands):

As of December 31, 2018 2019 2020 2021 2022 Thereafter Total payments	Operating Lease \$ 514 564 581 598 616 526 \$ 3,399	Capital Lease \$ 135 56 5   \$ 196
As of June 30, 2018 (unaudited): Remaining Fiscal 2018 2019 2020 2021 2022 Thereafter Total payments	Operating Lease \$ 263 564 581 598 616 526 \$ 3,148	Capital <u>Lease</u> \$ 68 56 5   \$ 129

#### Other Commitments; Contingencies

The Company has entered into service agreements with Lonza AG and its affiliates ("Lonza"), pursuant to which Lonza agreed to perform activities in connection with the manufacturing process of certain compounds. Such agreements, and related amendments, state that planned activities that are included in the signed work orders are, in some cases, binding and, hence, obligate the Company to pay the full price of the work order upon satisfactory delivery of products and services. Per the terms of the agreements, the Company has the option to cancel signed orders at any time upon written notice, which may or may not be subject to payment of a cancellation fee. The level of cancellation fees are sometimes dependent on the timing of the written notice in relation to the commencement date of the work, with the maximum cancellation fee equal to the full price of the work order. As of December 31, 2017 and June 30, 2018, the total amount of unconditional purchase obligations, including accrued amounts, under these agreements was \$10.9 million and \$13.9 million, respectively, and for the six months ended June 30, 2017 and 2018 were \$6.8 million (unaudited) and \$1.7 million (unaudited), respectively. As of December 31, 2017 and June 30, 2018 (unaudited), the Company had not incurred any cancellation fees for the work performed by Lonza.

The Company is also party to a cancellable assignment and license agreement that would require the Company to make milestone payments of up to \$33.2 million and royalty payments on net sales of products utilizing KSI-201 and related technology. Such milestones and royalties are dependent on future activity or product sales and are not estimable.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

#### **Tenant Improvement Allowance Payable**

In May 2013, the Company entered into a tenant improvement allowance agreement with its landlord. The agreement allowed the Company to draw down \$0.3 million for tenant improvements related to the office lease over the period from the execution of the agreement to October 2018. The interest rate is 8% per year over the lease period.

In March 2016, the Company entered into a lease amendment, under which the Company is allowed to draw down an additional allowance of \$0.4 million for tenant improvements related to the office lease over the period from the execution of the agreement to October 2023. The interest rate is 8% per year over 10 years. Principal and interest are payable on the first day of every month.

As of December 31, 2016 and 2017, the current portion of the tenant improvement allowance payable in the amount of \$0.1 million was included in accrued and other current liabilities. As of June 30, 2018, the current portion of the tenant improvement allowance payable in the amount of \$0.1 million (unaudited) was included in accrued and other current liabilities. As of December 31, 2016 and 2017, the non-current portion of the tenant improvement allowance payable in the amount of \$0.5 million and \$0.4 million, respectively, was included in other liabilities. As of June 30, 2018, the non-current portion of the tenant improvement allowance payable in the amount of \$0.4 million, respectively, was included in other liabilities.

#### Legal Proceedings

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of its business. Management is currently not aware of any matters that could have a material adverse effect on the Company's financial position, results of operations or cash flows. The Company records a legal liability when it believes that it is both probable that a liability may be imputed, and the amount of the liability can be reasonably estimated. Significant judgment by the Company is required to determine both probability and the estimated amount.

#### Indemnification

To the extent permitted under Delaware law, the Company has agreed to indemnify its directors and officers for certain events or occurrences while the director or officer is, or was serving, at the Company's request in such capacity. The indemnification period covers all pertinent events and occurrences during the director's or officer's service. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is not specified in the agreements; however, the Company has director and officer insurance coverage that reduces its exposure and enables the Company to recover a portion of any future amounts paid. The Company believes the estimated fair value of these indemnification agreements in excess of applicable insurance coverage is minimal.

#### 8. Income Taxes

The Company has not recorded any income tax expense. The Company has a net operating loss and has provided a valuation allowance against net deferred tax assets due to uncertainties regarding the Company's ability to realize these assets.

The components of income (loss) before income taxes were as follows (in thousands):

	Year Ended December 31, 2016	Year Ended December 31, 2017
United States	\$ (14,632)	\$ (3,240)
Foreign	(2,500)	(24,696)
Total loss before income taxes	<u>\$ (17,132</u> )	\$ (27,936)

# Kodiak Sciences Inc. Notes to Consolidated Financial Statements (Continued)

The tax effects of temporary differences that give rise to significant components of the deferred tax assets are as follows (in thousands):

	December 31, 2016	December 31, 2017
Deferred tax assets		
Net operating loss carryforwards	\$ 7,022	\$ 11,270
Intangible assets	783	618
Research and development tax credits	235	788
Accruals	172	393
Property and equipment	88	97
Other	65	26
Total gross deferred tax asset	\$ 8,365	\$ 13,192
Valuation allowance	(8,365)	(13,192)
Net deferred tax assets	<u>\$                                    </u>	\$

The Company has recorded a full valuation allowance against its net deferred tax assets due to the uncertainty as to whether such assets will be realized. The valuation allowance increased by \$4.8 million from December 31, 2016 to December 31, 2017 due primarily to the generation of current year net operating losses and research and development credits and offset by a decrease in the deferred taxes assets related to the reduction of the U.S. corporate income tax rate from the 2017 Tax Act.

On December 22, 2017, H.R. 1 (the Tax Act) was enacted and included broad tax reforms. The Tax Act reduced the U.S. corporate tax rate from 35% to 21% effective January 1, 2018. The rate change resulted in a \$2.5 million reduction in the Company's deferred tax assets from prior year with an offsetting change in the valuation allowance. The Tax Act also imposed a deemed repatriation of foreign earnings of subsidiaries; Kodiak Sciences GmbH is considered an E&P deficit corporation for the purposes of this provision and thus no income inclusion was required. The Company has elected to treat taxes on Global Intangible Low Tax Income ("GILTI") as period costs starting in 2018.

The SEC released Staff Accounting Bulletin 118 on December 22, 2017 to provide guidance in the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the tax reform. The ultimate impact of tax reform may differ from the Company's accounting for the relevant matters of the Tax Act, due to changes in clarification and interpretive guidance that may be issued by the IRS and actions the Company may take in response to the Tax Act. Tax reform is highly complex and the Company will continue to assess the impact that various provisions will have on its business. Any subsequent adjustment to these amounts will be recorded to current tax expense when the analysis is complete. Accordingly, the Company recorded a provisional charge for the remeasurement of deferred tax as a 21% as of December 31, 2017, with a corresponding offset to the Company's valuation allowance. The Company considers the accounting of the deferred tax re-measurements to be complete. However, ongoing guidance and accounting interpretation are expected in the near term and the Company expects to complete its analysis within the measurement period in accordance with SAB 118.

NOLs and tax credit carry-forwards are subject to review and possible adjustment by the Internal Revenue Service ("IRS") and may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant shareholders over a three-year period in excess of 50% as defined under Sections 382 and 383 in the Internal Revenue Code, which could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the Company's value immediately prior to the ownership change. Subsequent ownership

# Kodiak Sciences Inc.

# Notes to Consolidated Financial Statements (Continued)

changes may further affect the limitation in future years. The Company has not determined whether there has been any cumulative ownership changes or the impact on the utilization of the loss carryforwards if such changes have occurred.

As of December 31, 2017, the Company has \$18.1 million of federal and \$43.2 million state net operating loss available to offset future taxable income. The federal net operating loss carryforwards begin to expire in 2035 and the state net operating loss carryforwards begin to expire in 2035, if not utilized.

As of December 31, 2017, the Company also had federal and state research and development credit carryforwards of \$0.7 million and \$0.5 million, respectively. The federal research and development credit carryforwards expire beginning 2035. The California tax credit can be carried forward indefinitely.

A reconciliation of the Company's effective tax rate to the statutory U.S. federal rate is as follows:

	December 31, 2016	December 31, 2017
Federal statutory income tax rate	34.0%	34.0%
State taxes (tax effected)	5.1	7.1
Foreign tax rate differential	(2.8)	(17.1)
Research tax credit	0.4	0.8
Stock-based compensation	(0.2)	(0.3)
Other	(0.3)	(0.3)
Remeasurement of deferred tax due to tax law change	_	(8.8)
Change in valuation allowance	(36.2)	(15.4)
Provision for income taxes	0.0%	0.0%

The Company recognizes benefits of uncertain tax positions if it is more likely than not that such positions will be sustained upon examination based solely on their technical merits, as the largest amount of benefit that is more likely than not to be realized upon the ultimate settlement. It is the Company's policy to include penalties and interest expense related to income taxes as a component of other expense, net as necessary.

The beginning and ending unrecognized tax benefits amounts is as follows (in thousands):

	December 31, 2016	December 31, 2017
Unrecognized tax benefits at beginning of period	\$ 128	\$ 235
Increases related to prior year tax positions	—	102
Increases related to current year tax positions	107	20
Unrecognized tax benefits at end of period	\$ 235	\$ 357

The Company files income tax returns in the United States and Switzerland. The Company is not currently under examination by income tax authorities in federal, state or other jurisdictions. All tax returns remain open for examination by the federal and state authorities for three and four years, respectively, from the date of utilization of any net operating loss or credits.

#### 9. Redeemable Convertible Preferred Stock

As of December 31, 2016 and 2017 and June 30, 2018, the Company's certificate of incorporation authorized the Company to issue up to 13,753,595, 18,753,595, and 18,753,595 (unaudited), respectively, shares of redeemable convertible preferred stock.

# Kodiak Sciences Inc.

# Notes to Consolidated Financial Statements (Continued)

Issued and outstanding redeemable convertible preferred stock and its principal terms were as follows (in thousands, except per share and share amounts):

	Redeemable Preferre		<b>a</b> .	Original	
December 31, 2016	Authorized	Outstanding	Liquidation Value	Carrying Value	Issuance Price <sup>(1)</sup>
Series A redeemable convertible preferred stock	6,253,595	5,593,154	\$ 16,364	\$16,283	\$ 3.17
Series B redeemable convertible preferred stock	7,500,000	6,792,000	33,960	33,734	\$ 5.00
Total	13,753,595	12,385,154	\$ 50,324	\$50,017	
	Redeemable	Convertible			Original
December 31, 2017	Preferre		Liquidation	Carrying	Issuance
	Authorized	Outstanding	Value	Value	Price (1)
Series A redeemable convertible preferred stock	6,253,595	5,593,154	\$ 16,364	\$16,283	\$ 3.17
Series B redeemable convertible preferred stock	12,500,000	6,792,000	33,960	33,734	\$ 5.00
Total	18,753,595	12,385,154	\$ 50,324	\$50,017	
		Convertible			Original
June 30, 2018 (unaudited)	Preferre		Liquidation	Carrying	Issuance
	Authorized	Outstanding	Value	Value	Price (1)
Series A redeemable convertible preferred stock	6,253,595	5,593,154	\$ 16,364	\$16,283	\$ 3.17
Series B redeemable convertible preferred stock	12,500,000	6,792,000	33,960	33,734	\$ 5.00
Total	18,753,595	12,385,154	\$ 50,324	\$50,017	

(1) In connection with the incorporation of the Company in the year ended December 31, 2015, all previously issued and outstanding Series A-1, Series B-1 and Series C-1 redeemable convertible preferred stock of Oligasis were converted into shares of the Company's Series A redeemable convertible preferred stock at a par value of \$0.0001 per share. The original issuance price of Series A redeemable convertible preferred stock is calculated based on the original issuance price of the Oligasis' Series A-1, Series B-1 and Series C-1 redeemable convertible preferred stock of \$1.34, \$2.15, and \$3.73, respectively, on a weighted-average basis.

The holders of redeemable convertible preferred stock have various rights and preferences including the following:

#### Liquidation Preference

In the event of any liquidation event, the holders of the Series B redeemable convertible preferred stock are entitled to receive in any distribution of any of the assets of the Company in preference to the holders of the Series A redeemable convertible preferred stock or common stock, an amount equal to the original issue price, adjusted for any stock splits, stock dividends, recapitalizations, reclassifications, combinations or similar transactions ("anti-dilution adjustments"), plus all declared and unpaid dividends on such shares. After full payment to holders of the Series B redeemable convertible preferred stock, payment should be made to the holders of Series A redeemable convertible preferred stock, in preference to the holders of the common stock, an amount equal to the original issue price, adjusted for any anti-dilution adjustments, plus all declared and unpaid dividends on such shares. After full payment, and unpaid dividends on such shares. After the payment of the liquidation preference, all remaining assets available for distribution will be distributed ratably among the holders of the common stock. If available assets are insufficient to pay the full liquidation preference of a given series of redeemable convertible preferred stock, the assets available for distribution to holders of such preferred stock will be distributed among such holders on a pro rata basis.

#### Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

Notwithstanding the above, for purposes of determining the amount each holder of shares of redeemable convertible preferred stock is entitled to receive with respect to a liquidation event, each such holder of shares of a series of redeemable convertible preferred stock shall be deemed to have converted such holder's shares of such series into shares of common stock immediately prior to the liquidation event if, as a result of an actual conversion, such holder would receive, in the aggregate, an amount greater than the amount that would be distributed to such holder if such holder did not convert such series of redeemable convertible preferred stock into shares of common stock. If any such holder shall be deemed to have converted shares of redeemable convertible preferred stock into this paragraph, then such holder shall not be entitled to receive any distribution that would otherwise be made to holders of redeemable convertible preferred stock that have not converted into shares of common stock.

#### Conversion

Shares of any series of redeemable convertible preferred stock can be converted, at the option of the stockholder, into such number of fully paid and non-assessable shares of common stock. The conversion price is determined by dividing the original issuance price applicable to each series of redeemable convertible preferred stock, adjusted for any anti-dilution adjustments, by the applicable conversion price for such series. As of December 31, 2017 and June 30, 2018 (unaudited), the Company's redeemable convertible preferred stock is convertible into the Company's shares of common stock on a one-for-one basis.

Shares of redeemable convertible preferred stock shall automatically be converted into shares of common stock at the then effective conversion rate for such share, upon earlier to occur of: (1) the date, or the occurrence of event, specified by the vote of or written consent of the holders of at least a majority of the redeemable convertible preferred stock voting together as a single class on an as-converted basis; and (2) immediately prior to the consummation of a firm commitment underwritten initial public offering pursuant to an effective registration statement filed under the Securities Act, covering the offer and sale of the Company's common stock, provided that the per share price is at least \$10.00 and gross proceeds to the Company are equal to or greater than \$75.0 million.

#### Dividends

The redeemable convertible preferred stock dividends are not cumulative and are payable only when declared by the board of directors. No such dividends have been declared. Such dividends are in preference to any dividends to holders of common stock.

#### Voting Rights

Each holder of redeemable convertible preferred stock shall be entitled to the number of votes equal to the number of shares of common stock into which the shares of redeemable convertible preferred stock held by such holder could be converted as of the record date. Holders of redeemable convertible preferred stock and common stock generally vote as a single class.

#### **Redemption and Balance Sheet Classification**

The redeemable convertible preferred stock is recorded in mezzanine equity because while it is not mandatorily redeemable, it will become redeemable at the option of the stockholders upon the occurrence of certain deemed Liquidation Events that are considered not solely within the Company's control.

#### **10.** Common Stock

As of December 31, 2016 and 2017 and June 30, 2018, the Company's certificate of incorporation authorized the Company to issue 23,500,000, 28,500,000, and 28,500,000 (unaudited), respectively, shares of common stock at the par value of \$0.0001 per share. The holder of each share of common stock is entitled to one vote per share.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

The number of authorized shares of common stock may be increased or decreased (but not below the number of shares thereof then outstanding or reserved for issuance) by the affirmative vote of the holders of a majority (assuming the conversion of all redeemable convertible preferred stock into shares of the Company's common stock) of the capital stock of the Company entitled to vote and without a separate class vote of the common stock.

The board of directors has determined the fair value of the common stock, with assistance from management and external appraisers, by considering a number of objective and subjective factors including valuation of comparable companies, sales of redeemable convertible preferred stock, operating and financial performance and general and industry specific economic outlook, among other factors. The fair value of the common stock shall be determined by the board of directors until such time as the Company's common stock is listed on an established stock exchange or national market system. The fair value was determined in accordance with applicable elements of the Practice Aid.

The Company had reserved common stock, on an as-converted basis for future issuance as follows:

	December 31, 2016	December 31, 2017	June 30, 2018
			(unaudited)
Conversion of Series A redeemable convertible preferred stock	5,593,154	5,593,154	5,593,154
Conversion of Series B redeemable convertible preferred stock	6,792,000	6,792,000	6,792,000
Conversion of the 2017 convertible notes <sup>(1)</sup>	_	2,153,781	2,497,722
Conversion of the 2018 convertible notes <sup>(2)</sup>	_	—	
Exercise of redeemable convertible preferred stock warrants	—	500,000	500,000
Exercise of outstanding options under the 2015 Plan	1,263,757	1,204,414	3,383,478
Issuance of common stock under the 2015 Plan	551,817	605,557	398,693
Total	14,200,728	16,848,906	19,165,047

(1) Calculated as \$10.0 million principal and \$0.8 million accrued but unpaid interest as of December 31, 2017 and \$10.0 million (unaudited) principal and \$2.5 million (unaudited) accrued but unpaid interest as of June 30, 2018, convertible at \$5.00 per share of common stock.

(2) The conversion of the 2018 convertible notes into common stock is dependent on the price in a qualified initial public offering or other equity offering and the completion date of such offerings. These factors are not estimable and the number of common stock is not determinable.

#### 11. Stock-based Compensation

#### 2015 Equity Incentive Plan

In September 2015, the Company adopted the 2015 Equity Incentive Plan (the "2015 Plan") under which 2,810,513 shares of common stock were reserved for issuance through grants of stock options (incentive stock options ("ISOs"), nonqualified stock options ("NSOs") and restricted stock awards to employees, directors and consultants of the Company. The awards outstanding under the previously terminated 2009 Share Incentive Plan continued to be governed by their existing terms. Options under the Plans may be granted for periods of up to ten years and at prices based upon the estimated fair value of the shares on the date of grant as determined by the board of directors; provided, however, that (1) the exercise price of an option shall not be less than 100% of the estimated fair value of the shares on the date of grant, and (2) the exercise price of an ISO granted to a greater than 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant, and (3) the term of an ISO granted to a greater than 10% stockholder should not exceed five years. Options granted generally vest over four years. Shares issued under the 2015 Plan may, but need not, be exercisable immediately, but subject to a right of repurchase by the Company of any unvested shares.

# **Kodiak Sciences Inc.**

#### Notes to Consolidated Financial Statements (Continued)

# Stock Options

The following table summarizes the stock options activity (in thousands, except share and per share data).

		Outstanding Awards			
	Number of Shares Available for Grant	Number of Shares Underlying Outstanding Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Balance, January 1, 2016	1,814,560	102,937	\$ 0.23	7.92	\$ 86
Options granted	(1,209,595)	1,209,595	\$ 1.04	9.53	
Options exercised	—	(10,674)	\$ 0.45	6.76	7
Options forfeited or canceled	38,101	(38,101)	\$ 0.97	9.38	
Repurchase of early exercised options	51,689	_	\$ 0.12		
Restricted stock awards granted <sup>(1)</sup>	(142,938)				
Balance, December 31, 2016	551,817	1,263,757	\$ 0.98	9.42	\$ 100
Options granted	(137,500)	137,500	\$ 1.06		
Options exercised	_	(5,603)	\$ 0.50		3
Options forfeited or canceled	191,240	(191,240)	\$ 1.04		
Balance, December 31, 2017	605,557	1,204,414	\$ 0.98	8.49	\$ 41
Shares authorized (unaudited)	2,000,000	_			
RSAs granted (unaudited)	(27,500)	_			
Options granted (unaudited)	(2,299,698)	2,299,698	\$ 5.38		
Options exercised (unaudited)	_	(300)	\$ 0.12		2
Options forfeited or canceled (unaudited)	120,334	(120,334)	\$ 5.19		
Balance, June 30, 2018 (unaudited)	398,693	3,383,478	\$ 3.82	9.17	\$ 5,272
Shares exercisable, December 31, 2017		863,791	\$ 0.97	8.38	\$ 30
Vested and expected to vest, December 31, 2017		1,204,414	\$ 0.98	8.49	\$ 41
Shares exercisable, June 30, 2018 (unaudited)		1,603,379	\$ 2.79	8.66	\$ 4,152
Vested and expected to vest, June 30, 2018 (unaudited)		3,383,478	\$ 3.82	9.17	\$ 5,272

(1) Reflects an adjustment to shares available for grant related to the issuance of restricted stock awards under the 2015 Plan.

During the years ended December 31, 2016 and 2017, the Company granted 1,205,940 and 107,500 stock options, respectively, to employees with a weighted-average grant date fair value of \$0.60 and \$0.61 per share, respectively. During the six months ended June 30, 2017 and 2018, the Company granted 107,500 (unaudited) and 1,904,698 (unaudited) stock options, respectively, to employees with a weighted-average grant date fair value of \$0.61 (unaudited) and \$2.90 (unaudited) per share, respectively.

The total fair value of employee options vested during the year ended December 31, 2017 was \$0.2 million and during the six months ended June 30, 2018 was \$0.3 million (unaudited). As of December 31, 2017 and June 30, 2018, the unrecognized stock-based compensation of unvested employee options was \$0.4 million and \$5.9 million (unaudited), respectively, and it is expected to be recognized over a weighted-average period of 1.1 years and 1.7 years (unaudited), respectively.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

#### Shares Subject to Repurchase

The Company has a right of repurchase with respect to unvested shares issued upon early exercise of options at an amount equal to the lower of (1) the exercise price of each restricted share being repurchased and (2) the fair market value of such restricted share at the time the Company's right of repurchase is exercised. The Company's right to repurchase these shares lapses as those shares vest over the requisite service period.

Shares purchased by employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest according to their respective vesting schedules. Cash received for early exercised stock options is recorded as accrued liabilities and other current liabilities on the consolidated balance sheet and is reclassified to common stock and additional paid-in capital as such shares vest. At December 31, 2016 and 2017, 19,336 and 2,887 shares, respectively, remained subject to the Company's right of repurchase as a result of the early exercised stock options. At June 30, 2017 and 2018, 6,293 (unaudited) and 938 (unaudited) shares, respectively, remained subject to the Company's right of repurchase as a result of the early exercised stock options.

#### Fair Value of Options Granted

The fair value of the shares of common stock underlying the stock options was determined by the board of directors as there has been no public market for the Company's common stock.

The Company estimated the fair value of employee stock options using the Black-Scholes valuation model. The fair value of employee stock options is recognized on a straight-line basis over the requisite service period of the awards. The fair value of employee stock options was estimated using the following weighted-average assumptions:

	Year Ended December 31, 2016	Year Ended December 31, 2017	Six Months Ended June 30, 2017 (unaudited)	Six Months Ended June 30, 2018 (unaudited)
Expected volatility	64%	63%	63%	55%
Risk-free interest rate	1.22%	1.89%	1.89%	2.70%
Dividend yield	0%	0%	0%	0%
Expected term	5.84	6.00	6.00	5.97

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

*Expected Volatility*. The Company used an average historical stock price volatility of a peer group of publicly traded companies to be representative of its expected future stock price volatility, as the Company did not have any trading history for its common stock. For purposes of identifying these peer companies, the Company considered the industry, stage of development, size and financial leverage of potential comparable companies. For each grant, the Company measured historical volatility over a period equivalent to the expected term.

*Risk-Free Interest Rate.* The risk-free interest rate is based on the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term equivalent to the expected term of a stock award.

*Expected Dividend Rate.* The Company has not paid and does not anticipate paying any dividends in the near future. Accordingly, the Company has estimated the dividend yield to be zero.

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

Stock-based compensation expense recognized during the years ended December 31, 2016 and 2017 for options granted to employees was \$0.2 million and \$0.2 million, respectively. Stock-based compensation expense recognized during the six months ended June 30, 2017 and 2018 for options granted to employees was \$0.1 million (unaudited) and \$0.5 million (unaudited), respectively.

#### Non-Employee Stock-Based Compensation

During the years ended December 31, 2016 and 2017, the Company granted 3,655 and 30,000 shares of stock options to non-employees, respectively. During the six months ended June 30, 2017 and 2018, the Company granted 30,000 (unaudited) and 395,000 (unaudited) shares of stock options to non-employees, respectively. Stock-based compensation expense related to these stock options is recognized as the stock options are earned. The Company believes that the estimated fair value of the stock options is more readily measurable than the fair value of the services received. The fair value of stock options granted to non-employees is calculated at each grant date and remeasured at each reporting date using the Black-Scholes option pricing model.

Stock-based compensation expense recognized during the years ended December 31, 2016 and 2017 for stock-based awards granted to nonemployees was less than \$0.1 million. Stock-based compensation expense recognized during the six months ended June 30, 2017 and 2018 for stockbased awards granted to non-employees was less than \$0.1 million (unaudited) and \$0.2 million (unaudited), respectively. The fair value of nonemployee stock options was estimated using the following weighted-average assumptions:

	Year Ended December 31, 2016	Year Ended December 31, 2017	Six Months Ended June 30, 2017 (unaudited)	Six Months Ended June 30, 2018 (unaudited)
Expected volatility	65%	63%	63%	55%
Risk-free interest rate	1.86%	2.31%	2.27%	2.59%
Dividend yield	0%	0%	0%	0%
Expected term	9.09	9.35	9.63	9.03

#### **Restricted Stock Awards**

Restricted stock award ("RSAs") activity were as follows:

	Number of Shares Underlying Outstanding RSAs	Weighted Average Grant Date Fair Value
Unvested, December 31, 2015	665,678	\$ 0.14
Granted	142,938	\$ 1.04
Vested	(259,265)	\$ 0.68
Unvested, December 31, 2016	549,351	\$ 0.41
Vested	(257,718)	\$ 1.00
Unvested, December 31, 2017	291,633	\$ 0.45
Granted (unaudited)	27,500	\$ 5.38
Vested (unaudited)	(153,235)	\$ 1.27
Unvested, June 30, 2018 (unaudited)	165,898	\$ 0.50

Under the terms of the restricted stock agreements, 1/48th of the award vests monthly over four years, which is the requisite service period. Recipients of restricted stock awards generally have voting and dividend rights with respect to such shares upon grant without regard to vesting. Shares of restricted stock that do not vest are

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

subject to forfeiture. The Company recognizes stock-based compensation expense for RSAs on a straight-line basis over the requisite service period for the entire award. During the years ended December 31, 2016 and 2017, stock-based compensation expense recognized for RSAs was \$0.1 million. During the six months ended June 30, 2017 and 2018, stock-based compensation expense recognized for RSAs was less than \$0.1 million (unaudited) and \$0.2 million (unaudited), respectively. The total value of RSAs vested during the years ended December 31, 2016 and 2017, was \$0.1 million. The total value of RSAs vested during the six months ended June 30, 2017 and 2018 was less than \$0.1 million (unaudited), respectively. As of December 31, 2016 and 2017, the unrecognized stock-based compensation of unvested RSAs was \$0.2 million and \$0.1 million, and it is expected to be recognized over a weighted-average period of 1.12 and 0.60 years, respectively. As of June 30, 2018, the unrecognized stock-based compensation of unvested RSAs was \$0.1 million (unaudited), and it is expected to be recognized over a weighted-average period of 0.4 years (unaudited).

The following table is a summary of stock compensation expense by function (in thousands):

	Dece	r Ended mber 31, 2016	Decer	Ended nber 31, 017	Ju 2	nths Ended ne 30, 2017 udited)	Ju	nths Ended ne 30, 2018 audited)
Research and development General and administrative	\$	88 184	\$	171 104	\$	86 52	\$	365 384
Total stock-based compensation	\$	272	\$	275	\$	138	\$	749

#### 12. Redeemable Convertible Preferred Stock Warrants

On August 11, 2017 with the issuance of the 2017 convertible notes (Note 6), the Company issued warrants to purchase 500,000 shares of Series B redeemable convertible preferred stock at an exercise price of \$0.01 per share, including warrants issued to related parties to purchase an aggregate of 400,000 shares of Series B redeemable convertible preferred stock.

Upon the conversion of the Series B redeemable convertible preferred stock into shares of common stock, the warrants will convert into warrants to purchase 500,000 shares of common stock at an exercise price of \$0.01 per share. The outstanding warrants will terminate at the earlier of August 11, 2022 and a change of control unless exercised. These warrants have a net exercise provision under which their holders may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount of shares based on the fair market value of the Company's stock at the time of exercise of the warrants after deduction of the aggregate exercise price. These warrants contain provisions for adjustment of the exercise price and number of shares issuable upon the exercise of warrants in the event of certain stock dividends, stock splits, reorganizations, reclassifications and consolidations.

The estimated fair value of the redeemable convertible preferred stock warrants on the date of issuance of \$1.0 million was recorded as a debt discount. The redeemable convertible preferred stock warrant liability had a fair value of \$2.3 million as of December 31, 2017 and \$4.0 million (unaudited) as of June 30, 2018. The change in fair value was recorded in the consolidated statements of operations and comprehensive loss. As of December 31, 2017 and June 30, 2018 (unaudited), all of the warrants remain outstanding.

#### 13. Derivative Instruments

The redemption features of the 2017 convertible notes meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument. The 2017 derivative instrument is recorded at fair value, which was immaterial as of the issuance date, December 31, 2017 and June 30, 2018 (unaudited), due to the probability of occurrence of the underlying events being remote. The Company will continue to remeasure fair value of the 2017 derivative instrument until the earlier of the conversion or redemption of the 2017 convertible notes (see Note 5 and 6).

# Kodiak Sciences Inc.

# Notes to Consolidated Financial Statements (Continued)

The redemption features of the 2018 convertible notes meet the requirements for separate accounting and are accounted for as a single, compound derivative instrument. The 2018 derivative instrument is recorded at fair value, which was \$6.6 million (unaudited) as of the issuance date and \$7.4 million (unaudited) as of June 30, 2018 (see Note 5). The Company will continue to remeasure fair value of the 2018 derivative instrument until the earlier of the conversion or redemption of the 2018 convertible notes (see Note 6).

# 14. Net Loss per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders which excludes shares which are legally outstanding, but subject to repurchase by the Company (in thousands, except share and per share data):

	Year Ended December 31, 2016	Year Ended December 31, 2017	Six Months Ended June 30, 2017 (unaudited)	Six Months Ended June 30, 2018 (unaudited)
Numerator:				
Net loss attributable to common stockholders	\$ (17,132)	\$ (27,936)	\$ (11,783)	\$ (16,329)
Denominator:				
Weighted-average shares outstanding	7,850,183	7,932,717	7,930,831	7,941,430
Less: weighted-average unvested restricted shares and shares subject to repurchase	(638,823)	(417,381)	(486,219)	(220,463)
Weighted-average shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted	7,211,360	7,515,336	7,444,612	7,720,967
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (2.38)</u>	\$ (3.72)	<u>\$ (1.58)</u>	<u>\$ (2.11)</u>

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share attributable to common stockholders for the period presented because including them would have been antidilutive:

	Year Ended December 31, 2016	Year Ended December 31, 2017	Six Months Ended June 30, 2017 (unaudited)	Six Months Ended June 30, 2018 (unaudited)
Redeemable convertible preferred stock	12,385,154	12,385,154	12,385,154	12,385,154
Conversion of the 2017 convertible notes (1)	_	2,153,781	—	2,497,722
Conversion of the 2018 convertible notes (2)	_	_	_	4,226,243
Series B redeemable convertible preferred stock warrants	_	500,000	_	500,000
Options to purchase common stock	1,263,757	1,204,414	1,281,298	3,383,478
Unvested restricted stock awards	549,351	291,633	420,491	165,898
Unvested early exercised common stock options	19,336	2,887	6,293	938
Total	14,217,598	16,537,869	14,093,236	23,159,433

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

- (1) Calculated as \$10.0 million principal and \$0.8 million accrued but unpaid interest as of December 31, 2017 and \$10.0 million (unaudited)
- principal and \$2.5 million (unaudited) accrued but unpaid interest as of June 30, 2018, convertible at \$5.00 per share of common stock. (2) Calculated as \$33.0 million principal and \$0.8 million accrued but unpaid interest as of June 30, 2018, convertible at \$8.00 per share of common
  - stock.

#### Unaudited pro forma net loss per share

Unaudited pro forma basic and diluted net loss per share were computed to give effect to the automatic one-for-one conversion of all outstanding shares of redeemable convertible preferred stock into shares of common stock in connection with a Qualified IPO, using the as-converted method as though the conversion had occurred as of the beginning of the period presented or the date of issuance, if later, the automatic conversion of the redeemable convertible preferred stock warrants into warrants for common shares in connection with a Qualified IPO, conversion of the 2017 convertible notes at \$5.00 per share, the automatic conversion of the 2018 convertible notes at \$8.00 per share, the removal of gains or losses resulting from the remeasurement of the redeemable convertible preferred stock warrant liability, the removal of the effect of the interest expense as it relates to the convertible notes, and the removal of losses resulting from the remeasurement of the derivative instrument related to convertible debt as the underlying rights lapse in connection with the IPO. Common shares issuable upon exercise of the warrants are considered to be outstanding for unaudited pro forma basic and diluted net loss per share as they are issuable at little consideration.

Unaudited pro forma basic and diluted loss per share is computed as follows (in thousands, except share and per share data):

	Year ended December 31, 2017 (unaudited)	Six Months Ended June 30, 2018 (unaudited)
Numerator:		
Net loss attributable to common stockholders	<u>\$ (27,936)</u>	<u>\$ (16,329)</u>
Adjust: Change in fair value of redeemable convertible preferred stock warrants	\$ 1,260	\$ 1,705
Adjust: Change in fair value of 2018 derivative instrument	\$ _	\$ 764
Adjust: Convertible notes interest expense and amortization of debt discount and issuance cost	\$ 1,185	\$ 3,317
Pro forma net loss	\$ (25,491)	\$ (10,543)
Denominator		
Weighted-average shares outstanding used in computing net loss per share attributable to		
common stockholders, basic and diluted	7,515,336	7,720,967
Adjust: Conversion of redeemable convertible preferred stock	12,385,154	12,385,154
Adjust: Conversion of 2017 convertible notes	978,560	2,497,722
Adjust: Conversion of redeemable convertible preferred stock warrants into common stock		
warrants	195,890	500,000
Adjust: Conversion of 2018 convertible notes		3,452,405
Weighted-average shares outstanding used in computing pro forma net loss per share, basic and diluted	21,074,940	26,556,248
Pro forma net loss per share, basic and diluted	<u>\$ (1.21</u> )	<u>\$ (0.40</u> )

# Kodiak Sciences Inc.

#### Notes to Consolidated Financial Statements (Continued)

# 15. 401(k) Plan

In 2011, the Company adopted a 401(k) retirement and savings plan covering all employees. The 401(k) plan allows employees to make pre- and post-tax contributions up to the maximum allowable amount set by the Internal Revenue Service. The Company does not make matching contributions to the 401(k) plan on behalf of participants.

#### 16. Related Party Transactions

Baker Bros. Advisors LP, which holds more than 5% of the Company's stock, purchased \$6.6 million (unaudited) aggregate principal amount of 2018 convertible notes and \$3.0 million aggregate principal amount of 2017 convertible notes and warrants to purchase an aggregate of 150,000 shares of the Company's Series B redeemable convertible preferred stock (see Note 6 and 12).

The Dustin Moskovitz Trust DTD 12/27/05, which holds more than 5% of the Company's stock, purchased \$3.0 million (unaudited) aggregate principal amount of 2018 convertible notes and \$5.0 million aggregate principal amount of 2017 convertible notes and warrants to purchase an aggregate of 250,000 shares of the Company's Series B redeemable convertible preferred stock (see Note 6 and 12).

#### **17. Subsequent Events**

The Company evaluated subsequent events through April 30, 2018, the date on which the consolidated financial statements were available for issuance.

In February 2018, the Company received \$33.0 million in gross proceeds from the issuance of convertible notes (the "2018 convertible notes"), of which the Company issued \$31.2 million aggregate principal amount on February 2, 2018 and \$1.8 million aggregate principal amount on February 23, 2018. Of \$33.0 million aggregate principal amount of the 2018 convertible notes, \$9.6 million were issued to related parties. Interest on the unpaid principal balance of the notes accrues from the date of issuance, and compounds monthly from February 28, 2018 at a rate of 6.0% per year and is payable at maturity. Unless converted, the 2018 convertible notes mature on the earlier of (1) December 1, 2020 and (2) the date of the consummation of a change of control.

The Company's obligations with respect to the 2018 convertible notes are unsecured and subordinated to its obligations with respect to the 2017 convertible notes. The 2018 convertible notes include covenants that restrict the Company's ability to issue capital stock, repurchase or redeem capital stock, dispose of assets, incur debt, incur liens and make distributions to stockholders, including dividends. The 2018 convertible notes have customary events of default.

The 2018 convertible notes will automatically convert into shares of the Company's common stock at a price equal to (1) 80% of the initial price to public in a qualified initial public offering if such offering is completed prior to February 2, 2019 and (2) 75% of the initial price to public in a qualified initial public offering if such offering is completed after February 2, 2019. A qualified initial public offering for the purposes of the 2018 convertible notes is one in which the Company generates aggregate gross proceeds of at least \$75.0 million or all of the 2017 convertible notes convert into shares of the Company's common stock. In connection with an offering that does not constitute a qualified public offering, each holder of 2018 convertible notes may, at its option, elect to convert the principal amount and accrued interest of the 2018 convertible notes owned by such holder into shares of common stock at a price equal to (1) 80% of the initial price to public in such offering if such offering is completed after February 2, 2019.

#### 18. Subsequent Events (unaudited)

In connection with the issuance of the unaudited interim consolidated financial statements, the Company has evaluated subsequent events through September 7, 2018, the date the consolidated financial statements were available to be reissued.

# ΚΟΟΙΛΚ

https://www.sec.gov/Archives/edgar/data/1468748/000119312518293811/d516071d424b4... 10/8/2018