

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**Amendment No. 2  
to  
FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**Kezar Life Sciences, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)

**47-3366145**  
(I.R.S. Employer  
Identification Number)

4000 Shoreline Court, Suite 300  
South San Francisco, California 94080  
(650) 822-5600  
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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Chief Executive Officer  
Kezar Life Sciences, Inc.  
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**Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.**

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

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

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

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

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

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

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

**CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered	Amount to be registered <sup>(1)</sup>	Proposed maximum offering price per share	Proposed maximum aggregate offering price <sup>(1)(2)</sup>	Amount of registration fee <sup>(2)(3)</sup>
Common Stock, \$0.001 par value per share	5,366,667	\$16.00	\$85,866,672	\$10,691

(1) Includes 700,000 shares that the underwriters have the option to purchase to cover over-allotments, if any.

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

(3) The Registrant previously paid a registration fee of \$10,023 in connection with the initial filing of this Registration Statement.

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

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

SUBJECT TO COMPLETION, DATED JUNE 11, 2018

PRELIMINARY PROSPECTUS



## Common Stock

This is the initial public offering of shares of our common stock. We are offering 4,666,667 shares of our common stock. Prior to this offering, there has been no public market for our common stock. We currently expect the initial public offering price to be between \$14.00 and \$16.00 per share of common stock.

We have applied to list our common stock on The Nasdaq Global Market under the symbol "KZR."

Investing in our common stock involves a high degree of risk. See "[Risk Factors](#)" beginning on page 11 of this prospectus.

Certain of our stockholders (or their affiliates), including those affiliated with certain of our directors, have indicated an interest in purchasing an aggregate of approximately \$30.0 million of shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer, or no shares in this offering to these entities, or these entities may determine to purchase more, fewer, or no shares of common stock in this offering. The underwriters will receive the same underwriting discounts and commissions on any shares of common stock purchased by these entities as they will on any other shares of common stock sold to the public in this offering.

We are an "emerging growth company" under the federal securities laws and will be subject to reduced public company reporting requirements for this prospectus and future filings.

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

	PER SHARE	TOTAL
Initial public offering price	\$	\$
Underwriting discount and commissions (1)	\$	\$
Proceeds to Kezar Life Sciences, Inc. (before expenses)	\$	\$

(1) We refer you to "Underwriting" beginning on page 137 for additional information regarding underwriter compensation.

We have granted the underwriters an option to purchase up to 700,000 additional shares of common stock to cover over-allotments, if any, on the same terms and conditions as set forth above.

The underwriters expect to deliver the shares to purchasers against payment in New York, New York on \_\_\_\_\_, 2018 through the book-entry facilities of The Depository Trust Company.

Lead Book-Running Managers

Joint Book-Running Managers

**Jefferies**

**Cowen**

**Wells Fargo Securities**

**William Blair**

, 2018

## TABLE OF CONTENTS

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	<u>PAGE</u>
<a href="#">PROSPECTUS SUMMARY</a>	1
<a href="#">RISK FACTORS</a>	11
<a href="#">SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</a>	50
<a href="#">MARKET AND INDUSTRY DATA</a>	52
<a href="#">USE OF PROCEEDS</a>	53
<a href="#">DIVIDEND POLICY</a>	55
<a href="#">CAPITALIZATION</a>	56
<a href="#">DILUTION</a>	58
<a href="#">SELECTED CONSOLIDATED FINANCIAL DATA</a>	60
<a href="#">MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</a>	62
<a href="#">BUSINESS</a>	72
<a href="#">MANAGEMENT</a>	99
<a href="#">EXECUTIVE AND DIRECTOR COMPENSATION</a>	104
<a href="#">CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS</a>	119
<a href="#">PRINCIPAL STOCKHOLDERS</a>	123
<a href="#">DESCRIPTION OF CAPITAL STOCK</a>	126
<a href="#">SHARES ELIGIBLE FOR FUTURE SALE</a>	130
<a href="#">MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS</a>	133
<a href="#">UNDERWRITING</a>	137
<a href="#">LEGAL MATTERS</a>	145
<a href="#">EXPERTS</a>	146
<a href="#">WHERE CAN YOU FIND ADDITIONAL INFORMATION</a>	147
<a href="#">INDEX TO FINANCIAL STATEMENTS</a>	F-1

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"Kezar," the Kezar logo and other trademarks, trade names or service marks of Kezar Life Sciences, Inc. appearing in this prospectus are the property of Kezar Life Sciences, Inc. All other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert their rights thereto.

Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus or any free writing prospectus we may provide to you in connection with this offering 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 and any such free writing prospectus outside of the United States.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus. This summary is not complete and does not contain all of the information you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, especially the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus. Unless the context otherwise requires, the terms "Kezar," "Kezar Life Sciences," "the company," "we," "us," "our" and similar references in this prospectus refer to Kezar Life Sciences, Inc.*

### Overview

We are a clinical-stage biotechnology company, discovering and developing novel small molecule therapeutics to treat unmet needs in autoimmunity and cancer. Our lead product candidate, KZR-616, a first-in-class selective immunoproteasome inhibitor, has completed testing in healthy volunteers and is now enrolling a Phase 1b/2 clinical trial in lupus and lupus nephritis. We believe that the immunoproteasome is a validated target for the treatment of a wide variety of autoimmune diseases given the compelling published activity seen with proteasome inhibitors administered to patients with severe autoimmune diseases. Our Phase 1a clinical trial results provide evidence that KZR-616 avoids the side effects caused by non-selective proteasome inhibitors, side effects that prevent them from being developed as a treatment in autoimmunity. Initial top-line results from the Phase 1b portion of our KZR-616 trial are expected in 2019, and we plan to initiate up to four additional trials in autoimmune diseases in 2019. We are also leveraging our protein secretion pathway platform to discover and develop small molecule therapies targeting cancer and immuno-oncology.

We believe that KZR-616 has potential for the treatment of multiple autoimmune disease indications. In the last decade, research directed by our Chief Scientific Officer, along with work performed in multiple academic laboratories, has led to over 15 peer-reviewed publications showing that selective immunoproteasome inhibition results in a broad anti-inflammatory response, reducing autoimmune disease in animal models of lupus, lupus nephritis, rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis, Type 1 diabetes and other indications. This immunomodulatory response was broadly seen across many cell types of the immune system, including both T-cells and B-cells, and was demonstrated in a safe and non-immunosuppressive manner. This is distinct from other agents currently used to treat autoimmunity, which typically target a single cytokine or immune cell type or are broadly immunosuppressive.

We intend to develop KZR-616 to address underserved autoimmune diseases, including lupus nephritis and idiopathic inflammatory myopathies, where we have planned initial Phase 2 clinical trials, as well as other autoimmune indications. We estimate the addressable patient population in the United States for lupus, lupus nephritis and idiopathic inflammatory myopathies is 460,000, 100,000 and 70,000, respectively. Our first Phase 2 clinical trial is intended to evaluate KZR-616 for treatment of lupus nephritis, which currently has no FDA-approved drugs.

In 2017, we completed a Phase 1a clinical trial of KZR-616 in 82 healthy volunteers. In this trial, KZR-616 was generally well tolerated and we observed positive pharmacokinetics, or PK, and pharmacodynamics, or PD. This trial also identified multiple dose levels that resulted in selective and potent inhibition of the immunoproteasome and demonstrated biologic activity in ex vivo assays. We acquired exclusive worldwide rights to KZR-616 and an accompanying library of similar molecules pursuant to a license agreement with Onyx Therapeutics, Inc., or Onyx, a wholly owned subsidiary of Amgen, Inc., in June 2015. Patent coverage for KZR-616 extends to at least 2034.

Our discovery-stage platform, focused on the protein secretion pathway and the Sec61 translocon, builds upon research conducted by our co-founder Dr. Jack Taunton. We believe this platform has the potential to yield oral small molecule alternatives to currently marketed biologic therapeutics, to act as cytotoxic anti-cancer agents or to block the secretion of novel targets of interest in immuno-oncology or inflammation.

We are led by a strong management team with deep experience in small molecule drug discovery and development, operations, corporate finance and strategic planning. To finance our operations, we have raised equity capital from investors, including Morningside Venture Investments Limited, Cormorant Asset Management, Cowen Healthcare Investments, EcoR1 Capital Fund, Omega Fund IV, L.P., Pappas Capital, Qiming U.S. Healthcare Fund L.P., Bay City Capital and AJU IB Investment.

### **Autoimmunity and Selective Inhibition of the Immunoproteasome**

Autoimmune disease is an immune response directed against the body's own healthy cells and tissues. Approximately 50 million people in the United States suffer from more than 100 diagnosed autoimmune diseases according to the American Autoimmune Related Diseases Association, Inc. In indications large and small, there remain significant unmet medical needs and indications with no approved drugs beyond broadly prescribed steroids and similar immunosuppressive regimens. These result in high rates of infection, increased risk of malignancy and a wide variety of side effects arising from prolonged steroid use and, in diseases such as lupus nephritis, do not induce high rates of clinically meaningful responses.

Found in all cells of the body, proteasomes regulate intracellular protein degradation and are essential for many cellular processes such as cell division, cell differentiation and cytokine production. There are two main forms of the proteasome: the constitutive proteasome and the immunoproteasome. In most tissues of the body, the constitutive proteasome is the predominant form. In cells of the immune system, the immunoproteasome is the predominant form. While both forms of the proteasome mediate protein degradation, the two forms of the proteasome accomplish this utilizing different active sites. These active sites are responsible for cleaving and degrading proteins. Selective inhibition of the immunoproteasome has the potential to reduce inflammation by targeting dysfunctional immune cells involved in autoimmunity, such as T-cells and B-cells, without causing widespread immunosuppression.

### **Safety and Efficacy of Approved Proteasome Inhibitors**

The three proteasome inhibitors approved for the treatment of multiple myeloma, Velcade® (bortezomib), Kyprolis® (carfilzomib) and Ninlaro® (ixazomib), are potent "dual inhibitors" of both the immunoproteasome and the constitutive proteasome. This dual-targeting profile is necessary to make them effective treatments for multiple myeloma. However, dual proteasome inhibition is associated with hematologic issues such as thrombocytopenia, neutropenia and anemia, as well as constitutional toxicities such as fatigue and myalgia. In addition, Velcade and Ninlaro are associated with risk of peripheral neuropathy, likely due to the off-target activity of these drugs against proteins found in peripheral neurons.

Velcade has demonstrated clinical activity in several autoimmune diseases, including lupus, lupus nephritis, idiopathic thrombocytopenia purpura, autoimmune hemolytic anemia, primary Sjögren's syndrome and graft-versus-host disease. In preclinical models, proteasome inhibition blocked production of most inflammatory cytokines, including many of those targeted by current biologic drugs. However, long-term, chronic administration of Velcade in the setting of autoimmune diseases is not considered feasible due to its side effect profile, in particular hemologic toxicities and risk of peripheral neuropathy. As a result, this promising drug target has remained untapped for use in the treatment of autoimmune diseases.

### **KZR-616**

We believe we are the only company with a selective immunoproteasome inhibitor that has been nominated as a clinical candidate or is in clinical trials. In addition, we believe that KZR-616, if successfully developed and approved, may have the ability to become the standard of care across a broad range of autoimmune diseases based on the following expected key attributes:

- broad immunomodulatory activity that may allow it to outperform approved therapies and to work in indications where other drugs have failed;
- lack of immunosuppression, a key drawback to other approved therapies in autoimmunity; and

- avoidance of systemic toxicities associated with dual proteasome inhibitors and the peripheral neuropathy associated with Velcade and Ninlaro.

#### ***Our Phase 1a Clinical Trial and Ongoing Phase 1b/2 Clinical Trial***

In 2017, we completed a Phase 1a clinical trial in Australia to assess the safety, tolerability, PK, PD and immunomodulatory activity of KZR-616 in 82 healthy volunteers. In this trial, KZR-616 or placebo was administered as a single or repeat weekly subcutaneous administration over four weeks. Results from the trial were presented at the 2017 American College of Rheumatology Annual Meeting.

Administration of KZR-616 to healthy volunteers resulted in a dose-dependent increase in exposure and inhibition of immunoproteasome activity. Selective inhibition of the immunoproteasome over the constitutive proteasome was demonstrated using multiple PD assays and cytokine levels in ex vivo stimulation assays demonstrated an anti-cytokine effect of KZR-616 treatment consistent with preclinical models. Single and repeat weekly administration at doses that resulted in potent inhibition of the immunoproteasome were generally well tolerated. Two of 82 subjects experienced Grade 2 adverse events that were considered “systemic drug reactions” and were recorded as serious adverse events. These reactions included hypotension, sinus tachycardia, nausea, vomiting and rigors and chills. However, we observed none of the hematologic adverse events that are often seen with Velcade and Kyprolis. In addition, there were no changes in liver or kidney function, ECG abnormalities, prolonged constitutional adverse events, or signs of immunosuppression with weekly administration of KZR-616.

Following the completion of this trial, we filed an investigational new drug application, or IND, with the Division of Pulmonary and Rheumatology Products at the FDA. The IND is currently open with the FDA, and in March 2018, we began enrollment of patients in KZR-616-002, a multi-center Phase 1b/2 clinical trial in patients with lupus and lupus nephritis. The Phase 1b portion includes open-label dose escalation in patients with active lupus, with and without lupus nephritis, who have failed to respond to at least one standard therapeutic regimen. The primary endpoints of both portions of the trial are safety and tolerability. Secondary and exploratory endpoints include PK, PD and biomarker assessments and measures of efficacy. Initial top-line results from the Phase 1b portion of the trial are expected in the first half of 2019. The Phase 2 portion will be a randomized placebo-controlled, double-blind trial to evaluate the safety and efficacy of KZR-616 in patients with active proliferative lupus nephritis.

#### **Protein Secretion and the Sec61 Translocon**

We are conducting research and discovery efforts targeting protein secretion pathways as potential therapies for oncology and immuno-oncology indications. In mammalian cells, the secretion of proteins such as cytokines and the expression of cell surface transmembrane proteins such as cytokine receptors involve a process called cotranslational translocation. For most proteins, this process occurs via the Sec61 translocon, a highly conserved multi-subunit protein complex found in the membrane of the endoplasmic reticulum of all cells. Inhibition of the Sec61 translocon with small molecules blocks the secretion of some or all proteins, which can result in several physiologic outcomes, including altered cellular function, inhibition of cytokine release and/or cell death. We believe this platform has the potential to yield oral small molecule alternatives to currently marketed biologic therapeutics to act as cytotoxic anti-cancer agents or to block the secretion of novel targets of interest in inflammation or immuno-oncology.

## Our Pipeline

The following table sets forth the status and initial focus of our lead product candidate:

Program	Therapeutic Indication	Development Stage & Anticipated Milestones						
		Discovery	Preclinical	Phase 1a	Phase 1b	Phase 2	Phase 3	Anticipated Milestones
KZR-616	Systemic lupus erythematosus (SLE)							Phase 1b initial top-line data H1 2019
	Lupus nephritis							Initiate Phase 2 H1 2019
	Idiopathic inflammatory myopathies							Initiate Phase 2 in 2019
	Orphan / unmet need autoimmune							Potential to initiate Phase 1b or Phase 2 in 2019
	Orphan / unmet need autoimmune							Potential to initiate Phase 1b or Phase 2 in 2019
	Orphan / unmet need autoimmune							Potential to initiate Phase 1b or Phase 2 in 2019

## Our Strategy

Our strategy is to focus on the discovery, development and commercialization of novel small molecule therapeutics to address unmet medical needs. Key elements of our strategy are to:

- **Rapidly advance KZR-616 in multiple autoimmune indications, including orphan diseases and other areas of unmet needs.** We believe that KZR-616 has the potential to treat a wide range of autoimmune diseases. We are currently enrolling a Phase 1b/2 clinical trial in patients with lupus and lupus nephritis and plan to initiate additional Phase 1b or Phase 2 clinical trials in up to four other autoimmune indications in 2019. Assuming positive results from these trials, we intend to explore registration-enabling trials in each indication.
- **Identify small molecule disruptors of the protein secretion pathway and advance them into IND-enabling studies.** We believe we are the only company exploring the therapeutic potential of modulating the protein secretion pathway and the Sec61 translocon. We intend to leverage this platform to identify product candidates for the treatment of diseases with significant clinical need, initially in oncology and immuno-oncology.
- **Develop next-generation immunoproteasome inhibitors.** Over time, we intend to develop new chemistries with differentiated properties, alternate drug delivery methods, such as oral versus subcutaneous, or improved therapeutic windows.
- **Leverage our technical and business expertise to expand our pipeline of small-molecule product candidates.** Our management team, board of directors and clinical and scientific advisors have many years of institutional experience. As such, we intend to leverage the collective talent within our organization and network of advisors to guide our development plans and pipeline expansion, including acquiring or in-licensing small molecule compounds.
- **Maximize the value of our programs by maintaining flexibility to commercialize our product candidates independently or through collaborative partnerships.** We currently have exclusive global development and commercialization rights for our product candidates for all indications that we may pursue. While we may develop these products independently, we may also enter into strategic relationships with biotechnology or pharmaceutical companies to advance our product candidates.

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

Our business is subject to a number of risks of which you should be aware before making a decision to invest in our common stock. These risks are more fully described in the section titled "Risk Factors," including the following:

- We have a limited operating history, have never generated any revenues from product sales and have incurred significant operating losses since inception.
- We anticipate that we will continue to incur substantial operating losses for the foreseeable future and may never achieve or maintain profitability.
- We will require additional capital to finance our operations, which may not be available on acceptable terms, if at all.
- We may be required to make significant payments in connection with our license of KZR-616 from Onyx Therapeutics, Inc.
- Our future success is dependent on the successful clinical development, regulatory approval and commercialization of KZR-616 and any future drug candidates, without which our ability to generate revenue will be adversely affected.
- Because the results of preclinical studies or earlier clinical trials are not necessarily predictive of future results, our product candidates may not have favorable results in planned or future studies or trials, or may not receive regulatory approval.
- KZR-616 is intended to be used with a self-administered dual-chamber system, which may result in additional regulatory and other risks.
- We may encounter substantial delays in our clinical trials or we may fail to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities.
- If we are unable to obtain and maintain patent protection for KZR-616 or any future product candidates, or if the scope of the patent protection obtained is not sufficiently broad, we may not be able to compete effectively in our markets.

### **Our Corporate Information**

We were incorporated under the laws of the State of Delaware on February 19, 2015. Our principal executive offices are located at 4000 Shoreline Court, Suite 300, South San Francisco, California 94080, and our telephone number is (650) 822-5600. In January 2016, we incorporated our wholly owned Australian subsidiary, Kezar Life Sciences Australia Pty Ltd, which is a proprietary company limited by shares. Our corporate website address is [www.kezarlifesciences.com](http://www.kezarlifesciences.com). Information contained on, or accessible through, our website is not a part of this prospectus. We have included our website in this prospectus solely as an inactive textual reference.

### **Implications of Being an Emerging Growth Company**

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012, and we may remain an emerging company for up to five years. For so long as we remain an emerging growth company, we are permitted and intend to rely on certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. In particular, in this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.



In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of delayed adoption of new or revised accounting standards, and therefore we will be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

## THE OFFERING

Common stock to be offered	4,666,667 shares
Common stock to be outstanding after this offering	17,988,189 shares
Over-allotment option to purchase additional shares	700,000 shares
Use of proceeds	<p>We estimate that the net proceeds from this offering will be approximately \$61.3 million (or approximately \$71.1 million if the underwriters exercise in full their option to purchase up to 700,000 additional shares of common stock to cover over-allotments), based on an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.</p> <p>We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:</p> <ul style="list-style-type: none"><li>▪ to advance KZR-616 for the treatment of lupus and lupus nephritis through our KZR-616-002 Phase 1b/2 clinical trial;</li><li>▪ to advance KZR-616 for the treatment of idiopathic inflammatory myopathies and up to three additional autoimmune indications into Phase 1b or Phase 2 clinical trials;</li><li>▪ to advance discovery and preclinical development in our protein secretion program; and</li><li>▪ the remainder to fund other research and development activities, working capital and other general corporate purposes.</li></ul> <p>See "Use of Proceeds" for additional information.</p>
Risk factors	<p>You should read the section titled "Risk Factors" for a discussion of factors to consider carefully, together with all the other information included in this prospectus, before deciding to invest in our common stock.</p>
Proposed Nasdaq Global Market symbol	"KZR"
<p>Certain of our stockholders (or their affiliates), including those affiliated with certain of our directors, have indicated an interest in purchasing an aggregate of approximately \$30.0 million of shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer, or no shares in this offering to these entities, or these entities may determine to purchase more, fewer, or no shares of common stock in this offering. The underwriters will receive the same underwriting discounts and commissions</p>	

on any shares of common stock purchased by these entities as they will on any other shares of common stock sold to the public in this offering.

The number of shares of our common stock to be outstanding after this offering is based on 13,321,522 shares of common stock outstanding as of March 31, 2018, and excludes:

- 1,354,965 shares of our common stock issuable upon the exercise of outstanding stock options as of March 31, 2018, at a weighted-average exercise price of \$1.68 per share;
- 784,507 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2018 at an exercise price of \$5.91 per share;
- 4,000,000 shares of our common stock reserved for future issuance under our 2018 Equity Incentive Plan, or the 2018 Plan, which will become effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our 2018 Plan; and
- 200,000 shares of our common stock reserved for future issuance under our 2018 Employee Stock Purchase Plan, or ESPP, which will become effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our ESPP.

Unless otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the filing and effectiveness of our amended and restated certificate of incorporation immediately after the completion of this offering and the adoption of our amended and restated bylaws immediately prior to the completion of this offering;
- the automatic conversion of all outstanding shares of our redeemable convertible preferred stock as of March 31, 2018 into an aggregate of 12,263,126 shares of our common stock upon the completion of this offering;
- a 1-for-5.62 reverse stock split of our common stock and redeemable convertible preferred stock effected on June 8, 2018;
- no purchases by certain of our stockholders (or their affiliates), including those affiliated with certain of our directors, who have indicated an interest in purchasing an aggregate of approximately \$30.0 million of shares of our common stock in this offering;
- no exercise of the outstanding options described above; and
- no exercise by the underwriters of their option to purchase up to 700,000 additional shares of our common stock to cover over-allotments, if any.

### SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth our summary consolidated statements of operations data for the years ended December 31, 2016 and 2017, which has been derived from our audited consolidated financial statements appearing elsewhere in this prospectus. We have derived the statements of operations data for the three months ended March 31, 2017 and 2018 and the balance sheet data as of March 31, 2018 from our unaudited interim condensed consolidated financial statements appearing elsewhere in this prospectus. We have prepared the unaudited interim condensed consolidated financial statements on the same basis as our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for the fair statement of our unaudited interim condensed consolidated financial statements. The following summary consolidated financial data should be read with the sections titled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results that may be expected for any period in the future and our interim results are not necessarily indicative of our expected results for the year ending December 31, 2018.

(in thousands, except share and per share data)	YEAR ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	2016	2017	2017	2018
			(unaudited)	
<b>Summary of Consolidated Operations Data:</b>				
Operating expenses:				
Research and development	\$ 7,373	\$ 6,469	\$ 1,831	\$ 3,572
General and administrative	1,617	2,280	426	1,514
Total operating expenses	8,990	8,749	2,257	5,086
Loss from operations	(8,990)	(8,749)	(2,257)	(5,086)
Interest income	—	232	—	139
Net loss	\$ (8,990)	\$ (8,517)	\$ (2,257)	\$ (4,947)
Net loss per share: (1)				
Basic and diluted	\$ (26.56)	\$ (14.21)	\$ (4.43)	\$ (6.53)
Weighted average shares used in computing net loss per share: (1)				
Basic and diluted	338,446	599,291	509,143	757,399
Pro forma net loss per share (unaudited): (1)				
Basic and diluted		\$ (0.87)		\$ (0.38)
Weighted average shares outstanding used in computing pro forma net loss per share (unaudited): (1)				
Basic and diluted		9,762,770		13,020,525

(1) See Notes 2, 11 and 12 to our audited consolidated financial statements and Notes 2 and 5 to our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per share, pro forma net loss per share and the weighted-average number of shares used in the computation of the per share amounts.

(in thousands)	AS OF MARCH 31, 2018		
	ACTUAL	PRO FORMA (1)	PRO FORMA AS ADJUSTED (2) (3) (unaudited)
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 47,085	\$ 47,085	\$ 108,385
Working capital	45,636	45,636	106,936
Total assets	54,251	54,251	115,551
Redeemable convertible preferred stock	77,931	—	—
Accumulated deficit	(30,975)	(30,975)	(30,975)
Total stockholders' (deficit) equity	(30,489)	47,442	108,742

- (1) The pro forma column reflects the conversion of all of the outstanding shares of our redeemable convertible preferred stock into an aggregate of 12,263,126 shares of common stock upon completion of this offering.
- (2) The pro forma as adjusted column reflects the pro forma adjustments set forth above and: (i) the sale of 4,666,667 shares of our common stock in this offering at an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us; and (ii) the filing and effectiveness of our amended and restated certificate of incorporation.
- (3) Each \$1.00 increase or decrease in the assumed initial public offering price of \$15.00 per share would increase or decrease, respectively, the amount of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by \$4.3 million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase or decrease of 1.0 million in the number of shares of common stock offered by us would increase or decrease each of cash and cash equivalents, working capital, total assets and stockholders' (deficit) equity by \$14.0 million, assuming the assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, remains the same.

## 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 "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 prospects. In such an event, the market price of our common stock could decline and you may lose all or part of your investment.*

### Risks Related to Our Financial Position and Capital Needs

***We have incurred significant operating losses since inception and anticipate that we will continue to incur substantial operating losses for the foreseeable future and may never achieve or maintain profitability.***

Since inception in February 2015, we have incurred significant operating losses. Our net loss was \$9.0 million and \$8.5 million for the years ended December 31, 2016 and 2017, respectively, and \$4.9 million for the three months ended March 31, 2018. As of March 31, 2018, we had an accumulated deficit of \$31.0 million. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. Since inception, we have devoted substantially all of our efforts to research and preclinical and clinical development of our product candidates, as well as to expanding our management team and infrastructure. It could be several years, if ever, before we have a commercialized drug. The net losses we incur may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially if, and as, we:

- continue the ongoing and planned development of KZR-616;
- seek to discover and develop additional product candidates;
- initiate preclinical studies and clinical trials for any additional product candidates that we may pursue in the future;
- establish a sales, marketing, manufacturing and distribution infrastructure to commercialize any product candidate for which we may obtain marketing approval;
- continue to build a portfolio of product candidates through the acquisition or in-license of drugs, product candidates or technologies;
- seek marketing approvals for KZR-616 and any future product candidates that successfully complete clinical trials;
- maintain, protect and expand our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- implement operational, financial and management systems;
- attract, hire and retain additional administrative, clinical, regulatory and scientific personnel; and
- incur additional legal, accounting and other expenses associated with operating as a public company.

In addition, because of the numerous risks and uncertainties associated with pharmaceutical products and development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Our expenses could increase and profitability could be further delayed if we decide to or are required by regulatory authorities to perform studies or trials in addition to those currently expected, or if there are any delays in the development, or in the completion of any planned or future preclinical studies or clinical trials of our current and future product candidates. Even if we complete the development and regulatory processes described above, we anticipate incurring significant costs associated with launching and commercializing KZR-616 and any future product candidates.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations.

***We have a limited operating history and have never generated any revenue from product sales, which may make it difficult to evaluate the success of our business to date and to assess our future viability.***

We are a clinical-stage company founded in February 2015, and our operations to date have been largely focused on raising capital and undertaking preclinical studies and conducting early-stage clinical trials for KZR-616. As an organization, we have not yet demonstrated an ability to successfully complete clinical development, obtain regulatory approvals, manufacture a commercial-scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history.

Our ability to generate revenue from product sales and achieve profitability depends on our ability, alone or with any future collaborative partners, to successfully complete the development of, and obtain the regulatory approvals necessary to commercialize, KZR-616 and any future product candidates. We do not anticipate generating revenue from product sales for the next several years, if ever. Our ability to generate revenue from product sales depends heavily on our, or any future collaborators', success in:

- timely and successfully completing preclinical and clinical development of KZR-616 and any future product candidates;
- obtaining regulatory approvals for KZR-616 and any future product candidates for which we successfully complete clinical trials;
- launching and commercializing any product candidates for which we obtain regulatory approval by establishing a sales force, marketing and distribution infrastructure or, alternatively, collaborating with a commercialization partner;
- qualifying for coverage and adequate reimbursement by government and third-party payors for any product candidates for which we obtain regulatory approval, both in the United States and internationally;
- developing, validating and maintaining commercially viable, sustainable, scalable, reproducible and transferable manufacturing processes for KZR-616, a self-administered dual-chamber system for KZR-616 and any future product candidates that are compliant with current good manufacturing practices, or cGMP;
- establishing and maintaining supply and manufacturing relationships with third parties that can provide adequate amount and quality of starting materials, drug substance, drug product and drug delivery devices and services to support clinical development, as well as the market demand for KZR-616 and any future product candidates, if approved;
- obtaining market acceptance, if and when approved, of KZR-616 or any future product candidate as a viable treatment option by physicians, patients, third-party payors and others in the medical community;
- effectively addressing any competing technological and market developments;
- implementing additional internal systems and infrastructure, as needed;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations pursuant to such arrangements;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- securing appropriate pricing in the United States and internationally.

We expect our financial condition and operating results to continue to fluctuate from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. We may need to eventually transition from a company with a research and development focus to a company capable of undertaking commercial activities. We may encounter unforeseen expenses, difficulties, complications and delays and may not be successful in such a transition.

***We will require substantial additional capital to finance our operations, which may not be available on acceptable terms, if at all. Failure to obtain this necessary capital when needed may force us to delay, reduce or terminate certain of our product development programs or other operations.***

Our operations have consumed substantial amounts of cash since our inception. We expect our expenses to increase in connection with our ongoing and planned activities, particularly as we continue to develop and potentially commercialize our product candidates, in addition to costs associated with the acquisition or in-licensing of any

additional product candidates we may pursue. Our expenses could increase beyond expectations if the U.S. Food and Drug Administration, or FDA, or other regulatory authorities require us to perform clinical and other studies in addition to those that we currently anticipate. In addition, if we obtain marketing approval for our product candidates, we expect to incur significant expenses related to sales, marketing, manufacturing and distribution. Furthermore, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company.

As of March 31, 2018, our cash and cash equivalents was \$47.1 million. We believe that the net proceeds from this offering, together with our existing cash and cash equivalents, will fund our current operating plans through at least the next 12 months from the date the financial statements were issued. However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings, third-party funding, marketing and distribution arrangements, as well as other collaborations, strategic alliances and licensing arrangements, or any combination of these approaches.

In any event, we will require substantial additional capital to develop a delivery system for KZR-616, conduct additional clinical trials, seek regulatory approval and commence commercialization of KZR-616 or any future product candidates. Even if we believe we have sufficient capital for our current or future operating plans, we may seek additional capital if market conditions are favorable or if we have specific strategic considerations. Any additional capital raising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize KZR-616 and any future product candidates.

If we do not raise additional capital in sufficient amounts, or on terms acceptable to us, we may be prevented from pursuing discovery, development and commercialization efforts, which will harm our business, operating results and prospects.

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

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through public or private equity or debt financings, third-party funding, marketing and distribution arrangements, as well as other collaborations, strategic alliances and licensing arrangements, or any combination of these approaches. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a stockholder. In addition, we may issue equity or debt securities as consideration for obtaining rights to additional compounds.

Debt and equity financings, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as redeeming our shares, making investments, incurring additional debt, making capital expenditures, declaring dividends or placing limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could negatively impact our ability to conduct our business. If we raise additional capital through future collaborations, strategic alliances or third-party licensing arrangements, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us.

If we are unable to raise additional capital when needed, we may be required to delay, limit, reduce or terminate our drug development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise develop and market ourselves.

***We may be required to make significant payments in connection with our license agreement with Onyx Therapeutics, Inc., or Onyx, for KZR-616 and other compounds.***

In June 2015, we acquired rights to KZR-616, pursuant to a license agreement with Onyx, or the Onyx license agreement. Under the Onyx license agreement, we are subject to significant obligations, including payment obligations triggered upon achievement of specified milestones and royalties on licensed product sales, as well as other material obligations. We are obligated to pay Onyx milestone payments up to an aggregate of \$172.5 million upon the achievement of certain development, regulatory and sales milestone events. In addition, we are obligated to pay Onyx tiered royalties based on net sales of KZR-616. If these payments become due, we may not have sufficient funds available to meet our obligations and our development efforts may be harmed.



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

We have incurred substantial losses since inception and do not expect to become profitable in the near future, if ever. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. Under Sections 382 and 383 of the U.S. Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a rolling three-year period, the corporation’s ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past and may experience ownership changes in the future as a result of this offering and/or subsequent shifts in our stock ownership (some of which shifts are outside our control). As a result, if we earn net taxable income, our ability to use our pre-change NOLs to offset such taxable income may be subject to limitations. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and other tax attributes, which could negatively impact our future cash flows.

***Comprehensive tax reform legislation could adversely affect our business and financial condition.***

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or the Tax Act, was signed into law. The Tax Act contains, among other things, significant changes to corporate taxation, including (i) a reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, (ii) a limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), (iii) a limitation of the deduction for net operating losses to 80% of current year taxable income in respect of net operating losses generated during or after 2018 and elimination of net operating loss carrybacks, (iv) a one-time tax on offshore earnings at reduced rates regardless of whether they are repatriated, (v) immediate deductions for certain new investments instead of deductions for depreciation expense over time, and (vi) a modification or repeal of many business deductions and credits, including a reduction of the Orphan Drug Credit from 50% to 25% of eligible clinical costs. Any federal NOLs incurred in 2018 and in future years may now be carried forward indefinitely pursuant to the Tax Act. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. We will continue to examine the impact the Tax Act may have on our business and financial condition.

**Risks Related to the Development and Commercialization of Our Product Candidates**

***Our future success is substantially dependent on the successful clinical development, regulatory approval and commercialization of KZR-616 and any future product candidates. If we are not able to obtain required regulatory approvals, we will not be able to commercialize our product candidates and our ability to generate revenue will be adversely affected.***

The time required to obtain approval or other marketing authorizations by the FDA and comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. 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. KZR-616 is currently our only product candidate. We have not obtained regulatory approval for KZR-616 or any product candidate, and it is possible that neither KZR-616 nor any product candidates we may seek to develop in the future will ever obtain regulatory approval. Neither we nor any future collaborator is permitted to market KZR-616 or any future drug product candidates in the United States or abroad until we receive regulatory approval from the FDA or applicable foreign regulatory agency.

Prior to obtaining approval to commercialize KZR-616 and any other drug product candidate in the United States or abroad, we must demonstrate with substantial evidence from well controlled clinical trials, and to the satisfaction of the FDA or comparable foreign regulatory authorities, that such product candidates are safe and effective for their intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we believe the nonclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. The FDA may also require us to conduct additional nonclinical studies or clinical trials for our product candidates either prior to or post-approval, or it may object to

elements of our clinical development program. In addition, the FDA typically refers applications for novel drugs, like KZR-616 and potentially other of our future product candidates, to an advisory committee comprised of outside experts. The FDA is not bound by the recommendation of the advisory committee, but it considers such recommendation when making its decision.

Of the large number of products in development, only a small percentage successfully complete the FDA or comparable foreign regulatory authorities approval processes and are commercialized. The lengthy approval or marketing authorization process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval or marketing authorization to market our product candidates, which would significantly harm our business, financial condition, results of operations and prospects.

We have invested a significant portion of our time and financial resources in the development of KZR-616. Our business is dependent on our ability to successfully complete development of, obtain regulatory approval for, and, if approved, successfully commercialize KZR-616 and any future product candidates in a timely manner.

Even if we eventually complete clinical testing and receive approval of a new drug application, or NDA, or foreign marketing application for KZR-616 or any future product candidates, the FDA or the comparable foreign regulatory authorities may grant approval or other marketing authorization contingent on the performance of costly additional clinical trials, including post-market clinical trials. The FDA or the comparable foreign regulatory authorities also may approve or authorize for marketing a product candidate for a more limited indication or patient population that we originally request, and the FDA or comparable foreign regulatory authorities may not approve or authorize the labeling that we believe is necessary or desirable for the successful commercialization of a product candidate. Any delay in obtaining, or inability to obtain, applicable regulatory approval or other marketing authorization would delay or prevent commercialization of that product candidate and would materially adversely impact our business and prospects.

In addition, the FDA and comparable foreign regulatory authorities may change their policies, adopt additional regulations or revise existing regulations or take other actions, which may prevent or delay approval of our future products under development on a timely basis. Such policy or regulatory changes could impose additional requirements upon us that could delay our ability to obtain approvals, increase the costs of compliance or restrict our ability to maintain any marketing authorizations we may have obtained.

Furthermore, even if we obtain regulatory approval for KZR-616 and any future product candidates, we will still need to develop a commercial organization, establish a commercially viable pricing structure and obtain approval for adequate reimbursement from third-party and government payors. If we are unable to successfully commercialize KZR-616 and any future product candidates, we may not be able to generate sufficient revenue to continue our business.

***We may not be successful in our efforts to expand our pipeline of product candidates.***

A key element of our strategy is to build a pipeline of product candidates and to progress these product candidates through clinical development for the treatment of autoimmune indications. We may not be able to develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development, including as a result of safety, tolerability, efficacy or other characteristics that indicate that they are unlikely to be drugs that will receive marketing approval, achieve market acceptance or obtain reimbursements from third-party payors. If we do not successfully develop and commercialize product candidates or collaborate with others to do so, we will not be able to generate product revenue, which could significantly harm our financial position and adversely affect the trading price of our common stock.

***Success in preclinical studies or earlier clinical trials may not be indicative of results in future clinical trial results and we cannot assure you that any on-going, planned or future clinical trials will lead to results sufficient for the necessary regulatory approvals.***

Success in preclinical testing and earlier clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a product candidate. Preclinical tests and Phase 1 and Phase 2 clinical trials are primarily designed to test safety, to study pharmacokinetics and pharmacodynamics and to understand the side effects of product candidates at various doses

## [Table of Contents](#)

and schedules. Success in preclinical studies and earlier clinical trials does not ensure that later efficacy trials will be successful, nor does it predict final results. Our product candidates may fail to show the desired safety and efficacy in clinical development despite positive results in preclinical studies or having successfully advanced through earlier clinical trials.

In addition, the design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. As an organization, we have limited experience designing clinical trials and may be unable to design and execute a clinical trial to support regulatory approval. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical testing and earlier clinical trials. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, we may experience regulatory delays or rejections as a result of many factors, including changes in regulatory policy during the period of our product candidate development. Any such delays could negatively impact our business, financial condition, results of operations and prospects.

### ***We may encounter substantial delays or difficulties in our clinical trials.***

We may not commercialize, market, promote or sell any product candidate without obtaining marketing approval from the FDA or other comparable regulatory authority, and we may never receive such approvals. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans and will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

We may experience numerous unforeseen events prior to, during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize KZR-616 or any future product candidates, including:

- delays in reaching a consensus with regulatory authorities on design or implementation of our clinical trials;
- regulators or institutional review boards, or IRBs, may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- delays in reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and clinical trial sites;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, participants may drop out of these clinical trials at a higher rate than we anticipate or fail to return for post-treatment follow-up or we may fail to recruit suitable patients to participate in a trial;
- clinical trials of our product candidates may produce negative or inconclusive results;
- imposition of a clinical hold by regulatory authorities as a result of a serious adverse event, concerns with a class of product candidates or after an inspection of our clinical trial operations, trial sites or manufacturing facilities;
- occurrence of serious 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; or
- we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue from future drug sales or other sources. In addition, if we make manufacturing

## [Table of Contents](#)

or formulation changes to our product candidates, we may need to conduct additional testing to bridge our modified product candidate to earlier versions. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates, if approved, or allow our competitors to bring competing drugs to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

Additionally, if the results of our clinical trials are inconclusive or if there are safety concerns or serious adverse events associated with our product candidates, we may:

- be delayed in obtaining marketing approval, if at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw, or suspend, their approval of the drug or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be subject to the addition of labeling statements, such as warnings or contraindications;
- be sued; or
- experience damage to our reputation.

Our product development costs will also increase if we experience delays in testing or obtaining marketing approvals. We do not know whether any of our preclinical studies or clinical trials will begin as planned, need to be restructured or be completed on schedule, if at all.

Further, we, the FDA or an IRB may suspend our clinical trials at any time if it appears that we or our collaborators are failing to conduct a trial in accordance with regulatory requirements, including the FDA's current Good Clinical Practice, or GCP, regulations, that we are exposing participants to unacceptable health risks, or if the FDA finds deficiencies in our investigational new drug applications, or INDs, or the conduct of these trials. Therefore, we cannot predict with any certainty the schedule for commencement and completion of future clinical trials. If we experience delays in the commencement or completion of our clinical trials, or if we terminate a clinical trial prior to completion, the commercial prospects of our product candidates could be negatively impacted, and our ability to generate revenues from our product candidates may be delayed.

***We may not be able to obtain or maintain orphan drug designations or exclusivity for our product candidates, which could limit the potential profitability of our product candidates.***

Regulatory authorities in some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000, there is no reasonable expectation that sales of the drug in the United States will be sufficient to offset the costs of developing and making the drug available in the United States. If a drug with an orphan drug designation subsequently receives the first marketing approval for use in the rare disease or condition for which it was designated, then the sponsor is eligible for a seven-year period of marketing during which the FDA may not approve another sponsor's marketing application for a drug with the same active moiety and intended for the same use or indication as the approved orphan drug, except in limited circumstances, such as if a subsequent sponsor demonstrates its product is clinically superior. During a sponsor's orphan drug exclusivity period, however, competitors may receive approval for drugs with different active moieties for the same indication as the approved orphan drug, or for drugs with the same active moiety as the approved orphan drug, but for different indications. Orphan drug exclusivity could block the approval of one of our products for seven years if a competitor obtains approval for a drug with the same active moiety intended for the same indication before we do, unless we are able to demonstrate that grounds for withdrawal of the orphan drug exclusivity exist or that our product is clinically superior. Further, if a designated orphan drug receives marketing approval for an indication broader than the rare disease or condition for which it received orphan drug designation, it may not be entitled to exclusivity. For purposes of small molecule drugs, the FDA defines "same drug" as a drug that

contains the same active moiety and is intended for the same use as the drug in question. A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation.

We intend to pursue orphan drug designation for KZR-616 in orphan autoimmune indications. Obtaining orphan drug designation can be difficult, and we may not be successful in doing so. Even if we were to obtain orphan drug designation for a product candidate, that exclusivity may not effectively protect the drug from the competition of different drugs for the same condition, which could have already been approved or could be approved before or during the exclusivity period. Additionally, after an orphan drug is approved, the FDA could subsequently approve another application for the same drug for the same indication if the FDA concludes that the later drug is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusive marketing rights in the United States also may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. The failure to obtain an orphan drug designation for any product candidates we may develop, the inability to maintain that designation for the duration of the applicable period, or the inability to obtain or maintain orphan drug exclusivity could reduce our ability to make sufficient sales of the applicable product candidate to balance our expenses incurred to develop it, which would have a negative impact on our operational results and financial condition.

***KZR-616 is intended to be used with a self-administered dual-chamber system, which may result in additional regulatory and other risks.***

Beginning in Phase 2, KZR-616 is a lyophilized product candidate, meaning it is freeze-dried and must be reconstituted with water prior to delivery to a patient. While lyophilized products are common in the drug industry, we intend that if approved and commercialized, KZR-616 will be self administered by patients via a self-administered dual-chamber system. There are several technical challenges we will need to solve related to use of a self-administered dual-chamber system, including whether KZR-616 is amenable to use in such a device and whether it is sufficiently stable to meet regulatory requirements. We may not be able to solve these technical challenges, which would require that patients reconstitute KZR-616 themselves prior to injection. This method for administering KZR-616 could adversely affect market acceptance of KZR-616 and make it more difficult to conduct clinical trials of KZR-616. In addition, if we have not successfully developed the self-administered dual-chamber system by the time we commence Phase 3 clinical trials for KZR-616, we may need to seek approval for KZR-616 via a different delivery system, which could require additional bio-equivalence or efficacy clinical trials.

In addition, we will need to enter into an agreement with a contract manufacturing organization, or CMO, to manufacture the self-administered dual-chamber system, and we are aware of only one company that manufactures a self-administered dual-chamber system that has received FDA approval. We may be dependent on the sustained cooperation of a third-party or collaborators to supply the devices; to conduct the studies required for approval or clearance by the applicable regulatory agencies; and to continue to meet the applicable regulatory and other requirements to maintain approval or clearance once it has been received.

We may experience delays in obtaining regulatory approval of KZR-616 with a self-administered dual-chamber system given the increased complexity of the review process when approval of the product and device is sought under a single marketing application. If delivered by a self-administered dual-chamber system, KZR-616 may be regulated as a drug/device combination product. In the United States, each component of a combination product is subject to the requirements established by the FDA for that type of component, whether a drug, biologic or device. The determination whether a combination product requires a single marketing application or two separate marketing applications for each component is made by the FDA on a case-by-case basis. Although a single marketing application is generally sufficient for the approval of a combination product, the FDA may determine that separate marketing applications are necessary. This could significantly increase the resources and time required to bring a particular combination product to market. While we expect KZR-616, along with the self-administered dual-chamber system, to be subject to a single marketing application reviewed by the drug center at the FDA based on its primary mode of action as a drug, the FDA could disagree.

Failure to successfully develop or supply the device, delays in or failure of the studies conducted by us, our collaborators or third-party providers, or failure by us, our collaborators or the third-party providers to obtain or

maintain regulatory approval or clearance of the device could result in increased development costs, delays in or failure to obtain regulatory approval and associated delays in KZR-616 reaching the market. Further, failure to successfully develop or supply the device, or to gain or maintain its approval, could adversely affect sales of KZR-616.

***If we are not successful in discovering, developing and commercializing additional product candidates, our ability to expand our business and achieve our strategic objectives would be impaired.***

A key element of our strategy is to discover, develop and potentially commercialize a portfolio of product candidates to treat autoimmune diseases. We focus our clinical development on autoimmune diseases with high, unmet medical needs to leverage the development and regulatory paths available for first-in-class or best-in-class agents. Efforts to identify and develop product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development, approved products or commercial revenues for many reasons, including the following:

- the research methodology used may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render any product candidates we develop obsolete;
- any product candidates we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- a product candidate may 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;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by physicians, patients, the medical community or third-party payors.

We have limited financial and management resources and, as a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater market potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial drugs or profitable market opportunities. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in circumstances under which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. If we are unsuccessful in identifying and developing additional product candidates or are unable to do so, our business may be harmed.

***Clinical trials are very expensive, time consuming and difficult to design and implement.***

Our product candidates will require clinical testing before we are prepared to submit an NDA for regulatory approval. We cannot predict with any certainty if or when we might submit an NDA for regulatory approval for any of our product candidates or whether any such NDA will be approved by the FDA. Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. For instance, the FDA may not agree with our proposed endpoints for any future clinical trial of our product candidates, which may delay the commencement of our clinical trials. In addition, we may not succeed in developing and validating disease-relevant clinical endpoints based on insights regarding biological pathways for the disorders we are studying. The clinical trial process is also time consuming. We estimate that the successful completion of clinical trials of our product candidates will take several years to complete. Furthermore, failure can occur at any stage, and we could encounter problems that cause us to abandon or repeat clinical trials.

***Enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be delayed, made more difficult or rendered impossible by multiple factors outside our control.***

Identifying and qualifying patients to participate in our clinical trials is critical to our success. We intend to develop KZR-616 to address several autoimmune diseases with high degrees of unmet medical need, including lupus nephritis and idiopathic inflammatory myopathies, where we have planned initial Phase 2 clinical trials, as well as other rare autoimmune indications. If the actual number of patients with these disorders is smaller than we anticipate, we may encounter difficulties in enrolling patients in our clinical trials, thereby delaying or preventing development and approval of KZR-616 and any future product candidates. Even once enrolled we may be unable to



## [Table of Contents](#)

retain a sufficient number of patients to complete any of our trials. Patient enrollment and retention in clinical trials depends on many factors, including the size of the patient population, the nature of the trial protocol, the existing body of safety and efficacy data, the number and nature of competing treatments and ongoing clinical trials of competing therapies for the same indication, the proximity of patients to clinical sites and the eligibility criteria for the trial. Because our focus includes rare disorders, there are limited patient pools from which to draw in order to complete our clinical trials in a timely and cost-effective manner. Furthermore, our efforts to build relationships with patient communities may not succeed, which could result in delays in patient enrollment in our clinical trials. In addition, any negative results we may report in clinical trials of our product candidate may make it difficult or impossible to recruit and retain patients in other clinical trials of that same product candidate. Delays or failures in planned patient enrollment or retention may result in increased costs, program delays or both, which could have a harmful effect on our ability to develop our product candidates or could render further development impossible. In addition, we may rely on CROs and clinical trial sites to ensure proper and timely conduct of our future clinical trials and, while we intend to enter into agreements governing their services, we will be limited in our ability to compel their actual performance.

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

During the conduct of clinical trials, patients report changes in their health, including illnesses, injuries and discomforts, to their doctor. Often, it is not possible to determine whether or not the product candidate being studied caused these conditions. Regulatory authorities may draw different conclusions or require additional testing to confirm these determinations, if they occur. In addition, 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 observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects or patients. Many times, side effects are only detectable after investigational drugs are tested in large-scale pivotal trials or, in some cases, after they are made available to patients on a commercial scale after approval. If additional clinical experience indicates that KZR-616 or any future 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 harm our business, prospects, operating results and financial condition.

Moreover, if we elect, or are required, to delay, suspend or terminate any clinical trial of our product candidates, the commercial prospects of our product candidates may be harmed and our ability to generate revenue through their sale may be delayed or eliminated. Any of these occurrences may harm our business, financial condition and prospects significantly.

Additionally, if any of our product candidates receive marketing approval, the FDA could require us to include a black box warning in our label or adopt a REMS to ensure that the benefits outweigh the risks, which may include, among other things, a Medication Guide outlining the risks of the drug for distribution to patients and a communication plan to health care practitioners. Furthermore, if we or others identify undesirable side effects caused by our product candidates during development or after obtaining U.S. regulatory approval several potentially significant negative consequences could result, including:

- regulatory authorities may not permit us to initiate our studies or could put them on hold;
- regulatory authorities may not approve, or may withdraw, their approval of the product;
- regulatory authorities may require us to recall the product;
- regulatory authorities may add new limitations for distribution and marketing of the product;
- regulatory authorities may require the addition of warnings in the product label or narrowing of the indication in the product label;
- we may be required to create a Medication Guide outlining the risks of such side effects for distribution to patients;
- we may be required to change the way the product is administered or modify the product in some other way;
- we may be required to implement a REMS program;

## [Table of Contents](#)

- the FDA may require us to conduct additional clinical trials or costly post-marketing testing and surveillance to monitor the safety or efficacy of the product;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of the above events resulting from undesirable side effects or other previously unknown problems could prevent us from achieving or maintaining market acceptance of the affected product candidate, if approved. In addition, these events could substantially increase the costs of commercializing our product candidates and could significantly harm our business, prospects, financial condition and results of operations.

***Interim “top-line” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.***

From time to time, we may publish interim top-line or preliminary data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Differences between preliminary or interim data and final data could significantly harm our business prospects and may cause the trading price of our common stock to fluctuate significantly.

***We may explore strategic collaborations that may never materialize or we may be required to relinquish important rights to and control over the development and commercialization of our product candidates to any future collaborators.***

Overtime, our business strategy includes acquiring or in-licensing small molecule compounds directed at autoimmune or cancer indications. As a result, we intend to periodically explore a variety of possible strategic collaborations in an effort to gain access to additional product candidates or resources. At the current time, we cannot predict what form such a strategic collaboration might take. We are likely to face significant competition in seeking appropriate strategic collaborators, and strategic collaborations can be complicated and time consuming to negotiate and document. We may not be able to negotiate strategic collaborations on acceptable terms, or at all. We are unable to predict when, if ever, we will enter into any strategic collaborations because of the numerous risks and uncertainties associated with establishing them.

Future collaborations could subject us to a number of risks, including:

- we may be required to undertake the expenditure of substantial operational, financial and management resources;
- we may be required to issue equity securities that would dilute our stockholders' percentage ownership of our company;
- we may be required to assume substantial actual or contingent liabilities;
- we may not be able to control the amount and timing of resources that our strategic collaborators devote to the development or commercialization of our product candidates;
- strategic collaborators may select indications or design clinical trials in a way that may be less successful than if we were doing so;
- strategic collaborators may delay clinical trials, provide insufficient funding, terminate a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new version of a product candidate for clinical testing;
- strategic collaborators may not pursue further development and commercialization of products resulting from the strategic collaboration arrangement or may elect to discontinue research and development programs;
- strategic collaborators may not commit adequate resources to the marketing and distribution of our product candidates, limiting our potential revenues from these products;



## [Table of Contents](#)

- disputes may arise between us and our strategic collaborators 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's attention and consumes resources;
- strategic collaborators may experience financial difficulties;
- strategic collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in a manner that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- business combinations or significant changes in a strategic collaborator's business strategy may adversely affect a strategic collaborator's willingness or ability to complete its obligations under any arrangement;
- strategic collaborators could decide to move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors; and
- strategic collaborators could terminate the arrangement or allow it to expire, which would delay the development and may increase the cost of developing our product candidates.

***If the market opportunities for KZR-616 and any future product candidates are smaller than we believe they are, our business may suffer.***

We currently focus our drug development on treatments of autoimmune diseases. Our eligible patient population and pricing estimates may differ significantly from the actual market addressable by our product candidates. Our projections of both the number of people who have these disorders, as well as the subset of people with these disorders who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, patient foundations or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these disorders. The number of patients may turn out to be lower than expected. Likewise, the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or access. If the market opportunities for our product candidates are smaller than we estimate, our business and results of operations could be adversely affected.

***We face substantial competition, which may result in others developing or commercializing drugs before or more successfully than us.***

The development and commercialization of new drugs is highly competitive. We face competition with respect to KZR-616 and will face competition with respect to any other product candidates that we may seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of product candidates for the treatment of the indications that we are pursuing. 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.

More established companies may have a competitive advantage over us due to their greater size, resources and institutional experience. In particular, these companies have greater experience and expertise in securing reimbursement, government contracts and relationships with key opinion leaders, conducting testing and clinical trials, obtaining and maintaining regulatory approvals and distribution relationships to market products and marketing approved drugs. These companies also have significantly greater research and marketing capabilities than we do. If we are not able to compete effectively against existing and potential competitors, our business and financial condition may be harmed.

As a result of these factors, our competitors may obtain regulatory approval of their drugs before we are able to, which may limit our ability to develop or commercialize our product candidates. Our competitors may also develop therapies that are safer, more effective, more widely accepted or less expensive than ours, and may also be more successful than we in manufacturing and marketing their drugs. These advantages could render our product candidates obsolete or non-competitive before we can recover the costs of such product candidates' development and commercialization.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific, management and commercial personnel, establishing clinical trial sites and subject registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

***Even if KZR-616 or any future product candidates receive marketing approval, they may fail to achieve market acceptance by physicians, patients, third-party payors or others in the medical community necessary for commercial success.***

Even if KZR-616 or any future product candidates receive marketing approval, they may fail to gain market acceptance by physicians, patients, third-party payors and others in the medical community. If they do not achieve an adequate level of acceptance, we may not generate significant drug revenue and may not become profitable. The degree of market acceptance of KZR-616 or any future product candidates, if approved for commercial sale, will depend on a number of factors, including but not limited to:

- the efficacy and potential advantages compared to alternative treatments and therapies;
- the effectiveness of sales and marketing efforts;
- the strength of our relationships with patient communities;
- the cost of treatment in relation to alternative treatments and therapies, including any similar generic treatments;
- our ability to offer such drug for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments and therapies;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement;
- the prevalence and severity of any side effects; and
- any restrictions on the use of the drug together with other medications.

Our efforts to educate physicians, patients, third-party payors and others in the medical community on the benefits of our product candidates may require significant resources and may never be successful. Such efforts may require more resources than are typically required due to the complexity and uniqueness of our product candidates. Because we expect sales of our product candidates, if approved, to generate substantially all of our revenues for the foreseeable future, the failure of our product candidates to find market acceptance would harm our business. In addition, our rights to receive milestone payments and royalties related to KZR-616 and other product candidates will depend on our collaborators' abilities to achieve market acceptance of those product candidates.

***Even if we obtain regulatory approval for KZR-616 or any future product candidates, they will remain subject to ongoing regulatory oversight.***

Even if we obtain regulatory approvals for KZR-616 or any future product candidates, such approvals will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping and submission of safety and other post-market information. Any regulatory approvals that we receive for KZR-616 or any future product candidates may also be subject to a REMS, limitations on the approved indicated uses for which the drug may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 trials, and surveillance to monitor the quality, safety and efficacy of the drug. Such regulatory requirements may differ from country to country depending on where we have received regulatory approval.

In addition, drug manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP requirements and adherence to commitments made in the NDA or foreign marketing application. If we, or a regulatory authority, discover previously unknown problems with a drug, such as adverse events of unanticipated severity or frequency, or problems with the facility where the drug is manufactured or if a regulatory authority disagrees with the promotion,

## [Table of Contents](#)

marketing or labeling of that drug, a regulatory authority may impose restrictions relative to that drug, the manufacturing facility or us, including requesting a recall or requiring withdrawal of the drug from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of KZR-616 or any future product candidates, a regulatory authority may:

- issue an untitled letter or warning letter asserting that we are in violation of the law;
- seek an injunction or impose administrative, civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or comparable foreign marketing application or any supplements thereto submitted by us or our partners;
- restrict the marketing or manufacturing of the drug;
- seize or detain the drug or otherwise require the withdrawal of the drug from the market;
- refuse to permit the import or export of product candidates; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize KZR-616 or any future product candidates and harm our business, financial condition, results of operations and prospects.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. For example, in December 2016, the 21st Century Cures Act, or Cures Act, was signed into law. The Cures Act, among other things, is intended to modernize the regulation of drugs and to spur innovation, but its ultimate implementation is unclear. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability, which would adversely affect our business, prospects, financial condition and results of operations.

In addition, we cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict how these executive actions, including the Executive Orders, will be implemented and the extent to which they will affect the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

***If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell KZR-616 or any future product candidates, we may not be successful in commercializing KZR-616 or any future product candidates, if and when they are approved.***

To successfully commercialize any product candidate that may result from our development programs, we will need to build out our sales and marketing capabilities, either on our own or with others. The establishment and development of our own commercial team or the establishment of a contract sales force to market any product candidate we may develop will be expensive and time-consuming and could delay any drug launch. Moreover, we cannot be certain that we will be able to successfully develop this capability. We may seek to enter into collaborations with other entities to utilize their established marketing and distribution capabilities, but we may be unable to enter into such agreements on favorable terms, if at all. If any current or future collaborators do not commit sufficient resources to commercialize our product candidates, or we are unable to develop the necessary

capabilities on our own, we may be unable to generate sufficient revenue to sustain our business. We compete with many companies that currently have extensive, experienced and well-funded marketing and sales operations to recruit, hire, train and retain marketing and sales personnel. We will likely also face competition if we seek third parties to assist us with the sales and marketing efforts of KZR-616 and any future product candidates. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

***Even if we obtain and maintain approval for KZR-616 or any future product candidates from the FDA, we may never obtain approval for KZR-616 or any future product candidates outside of the United States, which would limit our market opportunities and could harm our business.***

Approval of a product candidate in the United States by the FDA does not ensure approval of such product candidate by regulatory authorities in other countries or jurisdictions, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. Sales of KZR-616 and any future product candidates outside of the United States will be subject to foreign regulatory requirements governing clinical trials and marketing approval. Even if the FDA grants marketing approval for a product candidate, comparable foreign regulatory authorities also must approve the manufacturing and marketing of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and more onerous than, those in the United States, including additional preclinical studies or clinical trials. In many countries outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that country. In some cases, the price that we intend to charge for any product candidates, if approved, is also subject to approval. Obtaining approval for KZR-616 and any future product candidates in the European Union from the European Commission following the opinion of the European Medicines Agency, if we choose to submit a marketing authorization application there, would be a lengthy and expensive process. Even if a product candidate is approved, the FDA or the European Commission, as the case may be, may limit the indications for which the drug may be marketed, require extensive warnings on the drug labeling or require expensive and time-consuming additional clinical trials or reporting as conditions of approval. 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 KZR-616 and any future product candidates in certain countries.

Further, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries. Also, regulatory approval for our product candidates may be withdrawn. If we fail to comply with the regulatory requirements, our target market will be reduced and our ability to realize the full market potential of KZR-616 and any future product candidates will be harmed and our business, financial condition, results of operations and prospects could be harmed.

***We will be required to obtain international regulatory approval to market and sell our product candidates outside of the United States.***

We anticipate marketing our product candidates, if approved, outside of the United States. In order to market any of our product candidates outside of the United States, we must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The requirements for approval differ from country to country and approval in one country, including approval by the FDA in the United States, does not ensure approval by the applicable regulatory authorities in any other country. As a result, we may not obtain foreign regulatory approvals on a timely basis, if at all. A failure or delay in obtaining regulatory approval in one jurisdiction could have a negative effect on the regulatory approval process in other jurisdictions, including approval by the FDA. The failure to obtain regulatory approval in foreign jurisdictions could harm our business.

***If we seek approval to commercialize KZR-616 or any future product candidates outside of the United States, a variety of risks associated with international operations could harm our business.***

If we seek approval of KZR-616 or any future product candidates outside of the United States, we expect that we will be subject to additional risks in commercialization including:

- different regulatory requirements for approval of therapies in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;

## Table of Contents

- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- foreign reimbursement, pricing and insurance regimes;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods and fires.

We have no prior experience in these areas. In addition, there are complex regulatory, tax, labor and other legal requirements imposed by many of the individual countries in and outside of Europe with which we will need to comply. Many biopharmaceutical companies have found the process of marketing their own products in foreign countries to be very challenging.

### ***Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidate that we may develop.***

We face an inherent risk of product liability exposure related to the testing of KZR-616 and any future product candidates in clinical trials and may face an even greater risk if we commercialize any product candidate that we may develop. If we cannot successfully defend ourselves against claims that any such product candidates caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidate that we may develop;
- loss of revenue;
- substantial monetary awards to trial participants or patients;
- significant time and costs to defend the related litigation;
- withdrawal of clinical trial participants;
- increased insurance costs;
- the inability to commercialize any product candidate that we may develop; and
- injury to our reputation and significant negative media attention.

Although we maintain product liability insurance coverage, such insurance may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage each time we commence a clinical trial and if we successfully commercialize any product candidate. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

### **Risks Related to Regulatory Compliance**

***Our relationships with customers, physicians, and third-party payors will be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, health information privacy and security laws, and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.***

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers and third-party payors may subject us to various federal and state fraud and abuse laws and other health care laws, including, without limitation, the federal Anti-Kickback Statute, the federal civil and criminal false claims laws and the law commonly referred to as the Physician Payments Sunshine Act and regulations. These laws will impact, among other things, our clinical research, proposed sales, marketing and educational programs. In addition, we may be subject to

## Table of Contents

patient privacy laws by both the federal government and the states in which we conduct or may conduct our business. The laws that will affect our operations include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities 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, in return for the purchase, recommendation, leasing or furnishing of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand, and prescribers, purchasers and formulary managers on the other. A person or entity does not need to have actual knowledge of this statute or specific intent to violate it to have committed a violation;
- federal civil and criminal false claims laws, including, without limitation, the False Claims Act, and civil monetary penalty laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid or other government payors that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. Federal Anti-Kickback Statute violations and certain marketing practices, including off-label promotion, implicate the False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit, among other things, a person from knowingly and willfully executing a scheme or making false or fraudulent statements to defraud any healthcare benefit program, regardless of the payor (e.g., public or private). In addition, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and its implementing regulations, impose certain requirements relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization on health plans, health care clearinghouses and certain health care providers, and their respective business associates that perform certain services involving the use or disclosure of individually identifiable health information;
- federal transparency laws, including the federal Physician Payments Sunshine Act, that require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to: (i) payments or other "transfers of value" made to physicians and teaching hospitals; and (ii) ownership and investment interests held by physicians and their immediate family members; and
- state and foreign law equivalents of each of the above federal laws, state laws that require manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures, 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 and state and local laws that require the registration of pharmaceutical sales representatives, or that otherwise restrict payments that may be made to healthcare providers; as well as state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

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 be subject to challenge under one or more of such laws.

It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm and the curtailment or restructuring of our operations.



The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. 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. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with multiple jurisdictions with different compliance and/or reporting requirements increases the possibility that a healthcare company may run afoul of one or more of the requirements.

***Coverage and adequate reimbursement may not be available for KZR-616 or any future product candidates, which could make it difficult for us to sell profitably, if approved.***

Market acceptance and sales of any product candidates that we commercialize, if approved, will depend in part on the extent to which reimbursement for these drugs and related treatments will be available from third-party payors, including government health administration authorities, managed care organizations and other private health insurers. Third-party payors decide which therapies they will pay for and establish reimbursement levels. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. However, decisions regarding the extent of coverage and amount of reimbursement to be provided for any product candidates that we develop will be made on a payor-by-payor basis. One payor's determination to provide coverage for a drug does not assure that other payors will also provide coverage, and adequate reimbursement, for the drug. Additionally, a third-party payor's decision to provide coverage for a therapy does not imply that an adequate reimbursement rate will be approved. Each payor determines whether or not it will provide coverage for a therapy, what amount it will pay the manufacturer for the therapy, and on what tier of its formulary it will be placed. The position on a payor's list of covered drugs, or formulary, generally determines the co-payment that a patient will need to make to obtain the therapy and can strongly influence the adoption of such therapy by patients and physicians. Patients who are prescribed treatments for their conditions and providers prescribing such services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products.

Third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. We cannot be sure that coverage and reimbursement will be available for any drug that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Inadequate coverage and reimbursement may impact the demand for, or the price of, any drug for which we obtain marketing approval. If coverage and adequate reimbursement are not available, or are available only to limited levels, we may not be able to successfully commercialize KZR-616 or any future product candidates that we develop.

***Healthcare legislative reform measures may have a negative impact on our business and results of operations.***

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives. In March 2010, the Patient Protection and Affordable Care Act of 2010, or the PPACA, was passed, which substantially changed the way healthcare is financed by both the government and private insurers, and significantly impacts the U.S. pharmaceutical industry. The PPACA, among other things: (i) 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; (ii) increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations; (iii) established annual fees and taxes on manufacturers of certain branded prescription drugs; (iv) expanded the availability of lower pricing under the 340B drug pricing program by adding new entities to the program; and (v) established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (and 70% commencing January 1, 2019)

## [Table of Contents](#)

point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

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

Other legislative changes have been proposed and adopted since the PPACA was enacted. These changes include aggregate reductions to Medicare payments to providers of 2% per fiscal year pursuant to the Budget Control Act of 2011, which began in 2013, and due to subsequent legislative amendments to the statute, including the BBA, will remain in effect through 2027 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012, among other things, 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. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have an adverse effect on customers for our product candidates, if approved, and, accordingly, our financial operations.

Additional changes that may affect our business include the expansion of new programs such as Medicare payment for performance initiatives for physicians under the Medicare Access and CHIP Reauthorization Act of 2015 which will be fully implemented in 2019. At this time, it is unclear how the introduction of the Medicare quality payment program will impact overall physician reimbursement. Also, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which have resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

We expect that these and other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved drug. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.



## Risks Related to Our Dependence on Third Parties

### ***We will rely on third parties to produce clinical and commercial supplies of KZR-616 and any future product candidates.***

Although we have small-scale internal manufacturing capabilities for characterization and preclinical assessment purposes, we do not expect to own or operate, facilities for drug manufacturing, storage and distribution, or testing. We will be dependent on third parties to manufacture the clinical supplies of our product candidates. The facilities used by our contract manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit our NDA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as cGMPs for manufacture of both active drug substances and finished product candidates, and the quality system regulation, or QSR, applicable to the self-administered dual-chamber system for KZR-616. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure and/or maintain regulatory approval for our product candidates. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

Further, we also will rely on third-party manufacturers to supply us with sufficient quantities of our product candidates, including KZR-616, to be used, if approved, for commercialization. Any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates.

Further, our reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including:

- inability to meet our product specifications and quality requirements consistently;
- delay or inability to procure or expand sufficient manufacturing capacity;
- issues related to scale-up of manufacturing;
- costs and validation of new equipment and facilities required for scale-up;
- our third-party manufacturers may not be able to execute our manufacturing procedures and other logistical support requirements appropriately;
- our third-party manufacturers may fail to comply with cGMP-compliance and other inspections by the FDA or other comparable regulatory authorities;
- our inability to negotiate manufacturing agreements with third parties under commercially reasonable terms, if at all;
- breach, termination or nonrenewal of manufacturing agreements with third parties in a manner or at a time that is costly or damaging to us;
- reliance on single sources for drug components;
- lack of qualified backup suppliers for those components that are currently purchased from a sole or single source supplier;
- our third-party manufacturers may not devote sufficient resources to our product candidates;
- we may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our product candidates;
- operations of our third-party manufacturers or suppliers could be disrupted by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier; and
- carrier disruptions or increased costs that are beyond our control.

Any of these events could lead to clinical trial delays, failure to obtain regulatory approval or impact our ability to successfully commercialize our current or any future product candidates once approved. Some of these events could

be the basis for FDA action, including injunction, request for recall, seizure, or total or partial suspension of production.

***Our business involves the use of hazardous materials and we and our third-party manufacturers and suppliers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.***

Our research and development activities and our third-party manufacturers' and suppliers' activities involve the controlled storage, use and disposal of hazardous materials owned by us, including the components of our product candidates and other hazardous compounds. We and our manufacturers and suppliers are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. We do not currently carry hazardous waste insurance coverage.

***We rely on third parties to conduct, supervise and monitor our preclinical studies and clinical trials, and if those third parties perform in an unsatisfactory manner, it may harm our business.***

We do not currently have the ability to independently conduct any clinical trials. We intend to rely on CROs and clinical trial sites to ensure the proper and timely conduct of our preclinical studies and clinical trials, and we expect to have limited influence over their actual performance. We rely upon CROs to monitor and manage data for our clinical programs, as well as the execution of future nonclinical studies. We expect to control only certain aspects of our CROs' activities. Nevertheless, we will be responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards, and our reliance on the CROs does not relieve us of our regulatory responsibilities.

We and our CROs are required to comply with the good laboratory practices, or GLPs, and GCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities in the form of International Conference on Harmonization guidelines for any of our product candidates that are in preclinical and clinical development. The regulatory authorities enforce GCPs through periodic inspections of trial sponsors, principal investigators and clinical trial sites. Although we rely on CROs to conduct GCP-compliant clinical trials, we remain responsible for ensuring that each of our GLP preclinical studies and clinical trials is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs does not relieve us of our regulatory responsibilities. If we or our CROs fail to comply with GCPs, the clinical data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. Accordingly, if our CROs fail to comply with these regulations or fail to recruit a sufficient number of subjects, we may be required to repeat clinical trials, which would delay the regulatory approval process.

Our reliance on third parties to conduct clinical trials will result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with CROs and other third parties can be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Such parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues; or
- undergo changes in priorities or become financially distressed.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If our CROs do not successfully carry out their contractual duties or obligations, fail to meet expected deadlines, fail to comply with regulatory requirements, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for any other reasons, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, any product candidate that we develop. As a result, our financial results and the commercial prospects for any product candidate that we develop would be harmed, our costs could increase, and our ability to generate revenue could be delayed. While we will have agreements governing their activities, our CROs will not be our employees, and we will not control whether or not they devote sufficient time and resources to our future clinical and nonclinical programs. These CROs may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials, or other drug development activities which could harm our business. We face the risk of potential unauthorized disclosure or misappropriation of our intellectual property by CROs, which may reduce our trade secret protection and allow our potential competitors to access and exploit our proprietary technology.

If our relationship with any of these CROs terminates, we may not be able to enter into arrangements with alternative CROs or do so on commercially reasonable terms. Switching or adding additional CROs involves substantial cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can negatively impact our ability to meet our desired clinical development timelines. Though we intend to carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a negative impact on our business, financial condition and prospects.

In addition, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA. The FDA may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the trial. The FDA may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA and may ultimately lead to the denial of marketing approval of KZR-616 and any future product candidates.

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

***If we are unable to obtain adequate protection for our proprietary know-how or obtain and maintain patent protection for KZR-616 or any future product candidates, or if the scope of the patent protection obtained is not sufficiently broad, or if our patents are insufficient to protect our product candidates for an adequate amount of time, we may not be able to compete effectively in our markets.***

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our development programs and product candidates. 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 KZR-616 and any future product candidates. We seek to protect our proprietary position by, among other methods, filing patent applications in the United States and abroad related to our current and future development programs and product candidates. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position.

We acquire, in-license and file patent applications directed to our product candidates in an effort to establish intellectual property positions directed to their compositions of matter as well as uses of these product candidates in the treatment of diseases. Our intellectual property includes patents and patent applications that we own as well as patents and patent applications that we in-license. For example, we have a field-specific exclusive license under the Onyx license agreement to some of our patent applications and patents relating to KZR-616.

## [Table of Contents](#)

We or our licensors have not pursued or maintained, and may not pursue or maintain in the future, patent protection for our product candidates in every country or territory in which we may sell our products, if approved. In addition, we cannot be sure that any of our pending patent applications or pending trademark applications will issue or that, if issued, they have or will issue in a form that will be advantageous to us. The United States Patent and Trademark Office, or the USPTO, international patent offices or judicial bodies may deny or significantly narrow claims made under our patent applications and our issued patents may be successfully challenged, may be designed around, or may otherwise be of insufficient scope to provide us with protection for our commercial products.

It is possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO may be significantly narrowed by the time they issue, if issued at all. The claims of our issued patents or patent applications when issued may not cover our current or future product candidates, or even if such patents provide coverage, the coverage obtained may not provide any competitive advantage. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our current or any future product candidates in the United States or in other foreign countries. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found, which can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue and even if such patents cover our current or any future product candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful opposition to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any product candidates or companion diagnostic that we may develop. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate and companion diagnostic under patent protection could be reduced.

If the patent applications we hold or have in-licensed with respect to our development programs and product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for KZR-616 or any future product candidates, it could dissuade companies from collaborating with us to develop and commercialize product candidates and future drugs and threaten our ability to commercialize, future drugs. Any such outcome could have a negative effect on our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. Furthermore, other parties may have developed or may develop technologies that may be related or competitive to our own, and such parties may have filed or may file patent applications, or may have received or may receive patents, claiming inventions that may overlap or conflict with those claimed in our patent applications or issued patents, with respect to either the same methods or formulations or the same subject matter, in either case, that we may rely upon to dominate our patent position in the market. Publications of discoveries in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. 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 which protect our technology or drugs, in whole or in part, or which effectively prevent others from commercializing competitive technologies and drugs. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to the United States patent law. These include provisions that affect the way patent applications are prosecuted and may affect the scope, strength and enforceability of our patent rights or the nature of

proceedings that may be brought by or against us related to our patent rights. The Leahy-Smith Act, in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could harm our business and financial condition.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or drugs and compete directly with us without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize KZR-616 or any future product candidates.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. For example, we may be subject to a third-party submission of prior art to the USPTO challenging the priority of an invention claimed within one of our patents, which submissions may also be made prior to a patent's issuance, precluding the granting of any of our pending patent applications. An adverse determination in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and drugs, or limit the duration of the patent protection of our technology and drugs. Moreover, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years from the earliest filing date of a non-provisional patent application. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Without patent protection for KZR-616 or any future product candidates, we may be open to competition from generic versions of such drugs. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Even if they are unchallenged, our issued patents and our pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. For example, a third-party may develop a competitive drug that provides benefits similar to one or more of our product candidates but that has a different composition that falls outside the scope of our patent protection. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our product candidates is not sufficiently broad to impede such competition, or if the breadth, strength or term (including any extensions or adjustments) of protection provided by the patents and patent applications we hold or pursue with respect to our product candidates or any future product candidates is successfully challenged, our ability to successfully commercialize our product candidates could be negatively affected, which would harm our business. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates or any future product candidates under patent protection would be reduced.

***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.***

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will have to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned and licensed patents and/or applications and any patent rights we may own or license in the future. We rely on our outside counsel or our licensing partners to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. government patent agencies require compliance with several procedural, documentary, fee

payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and we are also dependent on our licensors to take the necessary action to comply with these requirements with respect to our licensed intellectual property. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our products or technologies, we may not be able to stop a competitor from marketing products that are the same as or similar to our product candidates, which would have a material adverse effect on our business. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market and this circumstance could harm our business.

In addition, if we fail to apply for applicable patent term extensions or adjustments, we will have a more limited time during which we can enforce our granted patents. In addition, if we are responsible for patent prosecution and maintenance of patent rights in-licensed to us, any of the foregoing could expose us to liability to the applicable patent owner.

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

Given the amount of time required for the development, testing and regulatory review of new product candidates such as KZR-616, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their drug earlier than might otherwise be the case.

***Intellectual property rights do not necessarily address all potential threats to our business.***

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. The following examples are illustrative:

- others may be able to make compounds or formulations that are similar to our product candidates but that are not covered by the claims of any patents, should they issue, that we own or control;
- we or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or control;
- we might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or control may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive drugs for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.



***Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a negative impact on the success of our business.***

Our commercial success depends, in part, upon our ability and the ability of our future collaborators to develop, manufacture, market and sell KZR-616 and any future product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to KZR-616 and any future product candidates and technology, including interference proceedings, post grant review and inter partes review before the USPTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, which could have a negative impact on our ability to commercialize KZR-616 and any future product candidates. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Moreover, given the vast number of patents in our field of technology, we cannot be certain that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Many companies and research institutions have filed, and continue to file, patent applications related to selective immunoproteasome inhibitors. Some of these patent applications have already been allowed or issued, and others may issue in the future. While we may decide to initiate proceedings to challenge the validity of these or other patents in the future, we may be unsuccessful, and courts or patent offices in the United States and abroad could uphold the validity of any such patent. Furthermore, because patent applications can take many years to issue and may be confidential for 18 months or more after filing, and because pending patent claims can be revised before issuance, there may be applications now pending which may later result in issued patents that may be infringed by the manufacture, use or sale of our product candidates. Regardless of when filed, we may fail to identify relevant third party patents or patent applications, or we may incorrectly conclude that a third party patent is invalid or not infringed by our product candidates or activities. If a patent holder believes our product candidate infringes its patent, the patent holder may sue us even if we have received patent protection for our technology. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant drug revenue and against whom our own patent portfolio may thus have no deterrent effect. If a patent infringement suit were threatened or brought against us, we could be forced to stop or delay research, development, manufacturing or sales of the drug or product candidate that is the subject of the actual or threatened suit

If we are found to infringe a third party's valid and enforceable intellectual property rights, we could be required to obtain a license from such third party to continue developing, manufacturing and marketing our product candidate(s) and technology. Under any such license, we would most likely be required to pay various types of fees, milestones, royalties or other amounts. Moreover, we may not be able to obtain any required license on commercially reasonable terms or at all.

The licensing or acquisition of third-party intellectual property rights is a competitive area, and more established companies may also pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product candidate. In

addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. We may be required to indemnify collaborators or contractors against such claims. A finding of infringement could prevent us from manufacturing and commercializing KZR-616 or any future product candidates or force us to cease some or all of our business operations, which could materially harm our business. Even if we are successful in defending against such claims, litigation can be expensive and time consuming and would divert management's attention from our core business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

***We may be subject to claims asserting 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.***

Certain of our employees, consultants or advisors are currently, or were previously, employed at universities or other biotechnology or pharmaceutical companies, including our competitors or 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 these individuals or we have 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, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although 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, and we cannot be certain that our agreements with such parties will be upheld in the face of a potential challenge or that they will not be breached, for which we may not have an adequate remedy. 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.

***Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues. If we breach the Onyx license agreement or any of the other agreements under which we acquired, or will acquire, our product candidates, we could lose the ability to continue the development and commercialization of the related product.***

The licensing of intellectual property is of critical importance to our business and to our current and future product candidates, and we expect to enter into additional such agreements in the future.

In particular, our immunoproteasome program, including KZR-616, is dependent on our license agreement with Onyx. Pursuant to the Onyx license agreement, Onyx granted us an exclusive license under certain patent rights, and a non-exclusive license to certain know-how, controlled by Onyx and relating to our immunoproteasome program, to develop, manufacture or commercialize certain types of compounds, including KZR-616, that are selective for the immunoproteasome, for any and all uses other than those related to the diagnosis and/or treatment in humans of cancerous or pre-cancerous diseases and/or conditions, including those related to hematological diseases and/or conditions.

The licensed compounds, including KZR-616, are selective for the immunoproteasome and therefore are not known or believed (based on scientific literature and the Company's own research and development activities) to have any application in cancer or pre-cancerous conditions. However, notwithstanding these known characteristics of the licensed compounds, Onyx retains all rights under the licensed intellectual property rights that are not granted to the Company, and therefore Onyx retains rights under such intellectual property rights to develop and commercialize the licensed compounds in connection with the diagnosis and/or treatment in humans of cancerous or pre-cancerous diseases and/or conditions, including those related to hematological diseases and/or conditions, and also has the



rights to transfer these rights to a third-party. If one or more of the licensed compounds were found to have any application in cancer or pre-cancerous indications, and if Onyx or a third-party commercialized these compounds in such indications in forms that are commercially interchangeable with our licensed compounds during time periods in which we also commercialize such licensed compounds within our licensed field, sales of such compounds for such cancer and pre-cancerous indications could result in a threat of off-label use of such compounds in our licensed field, potentially diminishing our sales of the applicable licensed compounds in our licensed field.

The Onyx license agreement may limit or delay our ability to consummate certain transactions, may impact the value of those transactions, or may limit our ability to pursue certain activities. Specifically, under the Onyx license agreement, Onyx has a right of first negotiation under certain circumstances to obtain a license or a similar transfer of rights, if we are seeking to out-license rights to develop and/or commercialize certain licensed products.

Disputes may arise between us and any of these counterparties regarding intellectual property rights that are subject to such agreements, including, but not limited to:

- the scope of rights granted under the agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the agreement;
- our right to sublicense patent and other rights to third parties;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners;
- our right to transfer or assign our license; and
- the effects of termination.

These or other disputes over intellectual property that we have licensed (or will license or acquire in the future) may prevent or impair our ability to maintain our current arrangements on acceptable terms, or may impair the value of the arrangement to us. Any such dispute could have an adverse effect on our business.

If we fail to meet our obligations under these agreements in any material respect, the counterparty may have the right to terminate the respective agreement. Any uncured, material breach under a license could result in our loss of exclusive rights and may lead to a complete termination of our product development and any commercialization efforts for each of our product candidates. While we would expect to exercise all rights and remedies available to us, including seeking to cure any breach by us, and otherwise seek to preserve our rights under the technology licensed to or acquired by us, we may not be able to do so in a timely manner, at an acceptable cost or at all.

Furthermore, certain provisions in our intellectual property agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could affect the scope of our rights to the relevant intellectual property or technology, or affect financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

Competitors may infringe or otherwise violate our patents, the patents of our licensors or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file legal claims, which can be expensive and time consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing. The initiation of a claim against a third party may also cause the third party to bring counter claims against

us such as claims asserting that our patents are invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, inter partes review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is or will be no invalidating prior art, of which we and the patent examiner were unaware during prosecution. For the patents and patent applications that we have licensed, we may have limited or no right to participate in the defense of any licensed patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent protection on our current or future product candidates. Such a loss of patent protection could harm our business.

We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States. Our business could be harmed if in litigation the prevailing party does not offer us a license, and such a license may not be on commercially reasonable terms. Any litigation or other proceedings to enforce our intellectual property rights may fail, and even if successful, may result in substantial costs and distract our management and other employees.

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. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have an adverse effect on the price of our common stock.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. Uncertainties 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.

***Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect KZR-616 and any future product candidates.***

The United States has recently enacted and implemented wide ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on 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 weaken our ability to obtain new patents or to enforce patents that we have licensed or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions, changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we have licensed or that we may obtain in the future.

***We may not be able to protect our intellectual property rights throughout the world, which could negatively impact our business.***

Filing, prosecuting and defending patents covering KZR-616 and any future product candidates throughout the world would be prohibitively expensive. 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 may obtain patent protection but where patent enforcement is not as strong as that in the United

States. These products may compete with our products in jurisdictions where we do not have any issued or licensed patents and any future patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

***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.***

Since we rely on third parties to discover, develop, manufacture or commercialize KZR-616 or any future product candidates, or if we collaborate with third parties for the development of KZR-616 or any future product candidates, we must, at times, share trade secrets with them. We may also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development partnerships or similar agreements. We seek to protect our proprietary technology in part by 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 discovery of our trade secrets or other unauthorized use or disclosure could have an adverse effect on our business and results of operations.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets. Despite our efforts to protect our trade secrets, we may not be able to prevent the unauthorized disclosure or use of our technical know-how or other trade secrets by the parties to these agreements. Moreover, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our confidential information or proprietary technology and processes. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the collaborators, scientific advisors, employees, contractors and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a result. Moreover, if confidential information that is licensed or disclosed to us by our partners, collaborators, or others is inadvertently disclosed or subject to a breach or violation, we may be exposed to liability to the owner of that confidential information. Enforcing a claim that a third-party illegally obtained and is using our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets.

***Any trademarks we may obtain may be infringed or successfully challenged, resulting in harm to our business.***

We expect to rely on trademarks as one means to distinguish any of our product candidates that are approved for marketing from the products of our competitors. We have not yet selected trademarks for KZR-616 and have not yet begun the process of applying to register trademarks for KZR-616 or any other product candidate. Once we select trademarks and apply to register them, our trademark applications may not be approved. Third parties may oppose our trademark applications or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks, and we may not have adequate resources to enforce our trademarks.

In addition, any proprietary name we propose to use with KZR-616 or any other product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA.

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

In addition to seeking patent and trademark protection for our product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for any 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.

Moreover, our competitors may independently develop knowledge, methods and know-how equivalent to our trade secrets. Competitors could purchase our products and replicate some or all of the competitive advantages we derive from our development efforts for technologies on which we do not have patent protection. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

We also seek to preserve the integrity and confidentiality of our data and other confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and detecting the disclosure or misappropriation of confidential information and enforcing a claim that a party illegally disclosed or misappropriated confidential information is difficult, expensive and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach. In addition, our confidential information may otherwise become known or be independently discovered by competitors, in which case we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us.

**Risks Related to Our Business Operations, Employee Matters and Managing Growth**

***We are highly dependent on the services of our Chief Executive Officer, John Fowler, and our President and Chief Scientific Officer, Dr. Christopher Kirk, and if we are not able to retain these members of our management team or recruit and retain additional management, clinical and scientific personnel, our business will be harmed.***

We are highly dependent on our Chief Executive Officer, John Fowler, and our President and Chief Scientific Officer, Dr. Christopher Kirk. Each of them may currently terminate their employment with us at any time and will continue to be able to do so after the closing of this offering. The loss of the services of either of these persons could impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining other senior executives, qualified scientific and clinical personnel and, if we progress the development of any of our product candidates, commercialization, manufacturing and sales and marketing personnel, will be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize our product candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on

consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high-quality personnel, our ability to pursue our growth strategy will be limited.

Our future performance will also depend, in part, on our ability to successfully integrate newly hired executive officers into our management team and our ability to develop an effective working relationship among senior management. Our failure to integrate these individuals and create effective working relationships among them and other members of management could result in inefficiencies in the development and commercialization of our product candidates, harming future regulatory approvals, sales of our product candidates and our results of operations. Additionally, we do not currently maintain “key person” life insurance on the lives of our executives or any of our employees.

***We will need to expand our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.***

As of May 4, 2018, we had 20 full-time employees. As the clinical development of our product candidates progresses, we also expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of research, drug development, regulatory affairs and, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

***Significant disruptions of our information technology systems or data security incidents could result in significant financial, legal, regulatory, business and reputational harm to us.***

We are increasingly dependent on information technology systems and infrastructure, including mobile technologies, to operate our business. In the ordinary course of our business, we collect, store, process and transmit large amounts of sensitive information, including intellectual property, proprietary business information, personal information and other confidential information. It is critical that we do so in a secure manner to maintain the confidentiality, integrity and availability of such sensitive information. We have also outsourced elements of our operations (including elements of our information technology infrastructure) to third parties, and as a result, we manage a number of third-party vendors who may or could have access to our computer networks or our confidential information. In addition, many of those third parties in turn subcontract or outsource some of their responsibilities to third parties. While all information technology operations are inherently vulnerable to inadvertent or intentional security breaches, incidents, attacks and exposures, the accessibility and distributed nature of our information technology systems, and the sensitive information stored on those systems, make such systems potentially vulnerable to unintentional or malicious, internal and external attacks on our technology environment. Potential vulnerabilities can be exploited from inadvertent or intentional actions of our employees, third-party vendors, business partners, or by malicious third parties. Attacks of this nature are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives (including, but not limited to, industrial espionage) and expertise, including organized criminal groups, “hacktivists,” nation states and others. In addition to the extraction of sensitive information, such attacks could include the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information. In addition, the prevalent use of mobile devices increases the risk of data security incidents.

Significant disruptions of our, our third-party vendors' and/or business partners' information technology systems or other similar data security incidents could adversely affect our business operations or result in the loss, misappropriation, or unauthorized access, use or disclosure of, or the prevention of access to, sensitive information, which could result in financial, legal, regulatory, business and reputational harm to us. In addition, information technology system disruptions, whether from attacks on our technology environment or from computer viruses, natural disasters, terrorism, war and telecommunication and electrical failures, could result in a material disruption

of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data.

There is no way of knowing with certainty whether we have experienced any data security incidents that have not been discovered. While we have no reason to believe this to be the case, attackers have become very sophisticated in the way they conceal access to systems, and many companies that have been attacked are not aware that they have been attacked. Any event that leads to unauthorized access, use or disclosure of personal information, including but not limited to personal information regarding our patients or employees, could disrupt our business, harm our reputation, compel us to comply with applicable federal and/or state breach notification laws and foreign law equivalents, subject us to time consuming, distracting and expensive litigation, regulatory investigation and oversight, mandatory corrective action, require us to verify the correctness of database contents, or otherwise subject us to liability under laws, regulations and contractual obligations, including those that protect the privacy and security of personal information. This could result in increased costs to us, and result in significant legal and financial exposure and/or reputational harm. In addition, any failure or perceived failure by us or our vendors or business partners to comply with our privacy, confidentiality or data security-related legal or other obligations to third parties, or any further security incidents or other inappropriate access events that result in the unauthorized access, release or transfer of sensitive information, which could include personally identifiable information, may result in governmental investigations, enforcement actions, regulatory fines, litigation, or public statements against us by advocacy groups or others, and could cause third parties, including clinical sites, regulators or current and potential partners, to lose trust in us or we could be subject to claims by third parties that we have breached our privacy- or confidentiality-related obligations, which could materially and adversely affect our business and prospects. Moreover, data security incidents and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures intended to protect our information technology systems and infrastructure, there can be no assurance that such measures will successfully prevent service interruptions or security incidents.

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

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by these parties could include intentional failures to comply with FDA regulations or the regulations applicable in other jurisdictions, provide accurate information to the FDA and other regulatory authorities, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct also could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from government investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could result in significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm and the curtailment or restructuring of our operations, any of which could have a negative impact on our business, financial condition, results of operations and prospects.



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

From time to time, we may evaluate various acquisitions and strategic collaborations, including licensing or acquiring complementary drugs, intellectual property rights, technologies or businesses, as deemed appropriate to carry out our business plan. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- assimilation of operations, intellectual property and drugs of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing drug programs and initiatives in pursuing such a strategic partnership, merger or acquisition;
- 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 drugs or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired technology and/or drugs sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we engage in future acquisitions or strategic partnerships, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense. Moreover, we may not be able to locate suitable acquisition opportunities, and this inability could impair our ability to grow or obtain access to technology or drugs that may be important to the development of our business.

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

***No public market for our common stock currently exists, and a public market may not develop or be liquid enough for you to sell your shares quickly or at market price.***

Prior to this offering, there has not been a public market for our common stock. If an active trading market for our common stock does not develop following this offering, you may not be able to sell your shares quickly or at the market price. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares of our common stock and may impair our ability to acquire other companies or technologies by using our common stock as consideration. The initial public offering price of our common stock will be determined by negotiations between us and representatives of the underwriters and may not be indicative of the market prices of our common stock that will prevail in the trading market.

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

The market price of our common stock is likely to be volatile. The stock market in general and the market for biopharmaceutical and pharmaceutical companies in particular, has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. In addition to the factors discussed in this "Risk Factors" section and elsewhere in this prospectus, the market price for our common stock may be influenced by the following:

- the commencement, enrollment or results of our planned or future clinical trials of KZR-616 and any future product candidates or those of our competitors;
- the success of competitive drugs or therapies;
- regulatory or legal developments in the United States and other countries;
- the success of competitive products or technologies;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;



## [Table of Contents](#)

- the level of expenses related to KZR-616 and any future product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- our inability to obtain or delays in obtaining adequate drug supply for any approved drug or inability to do so at acceptable prices;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, political, and market conditions and overall fluctuations in the financial markets in the United States and abroad; and
- investors' general perception of us and our business.

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from selling their shares at or above the price paid for the shares and may otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general, and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies.

Some companies that have experienced volatility in the trading price of their shares have been the subject of securities class action litigation. Any lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment. We also may decide to settle lawsuits on unfavorable terms. Any such negative outcome could result in payments of substantial damages or fines, damage to our reputation or adverse changes to our business practices. Defending against litigation is costly and time-consuming, and could divert our management's attention and our resources. Furthermore, during the course of litigation, there could be negative public announcements of the results of hearings, motions or other interim proceedings or developments, which could have a negative effect on the market price of our common stock.

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

Based upon our shares of our common stock outstanding as of June 1, 2018, upon the completion of this offering, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock before this offering will, in the aggregate, beneficially own shares representing approximately 47.4% of our outstanding common stock. If our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock acted together, they may be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. The concentration of voting power and transfer restrictions could delay or prevent an acquisition of our company on terms that other stockholders may desire or result in the management of our company in ways with which other stockholders disagree.

***If research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our stock price and trading volume could decline.***

The trading market for our common stock will be influenced by 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. Equity research analysts may elect not to provide research coverage of our common stock after the completion of this offering, and such lack of research coverage may adversely affect the market price of our common stock. In the event we do have equity research analyst coverage, we will not have any control over the analysts or the content and opinions included in their reports. The price of our shares could decline if one or more

equity research analysts downgrade our shares or issue other unfavorable commentary or research about us. If one or more equity research analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares could decrease, which in turn could cause the trading price or trading volume of our common stock to decline.

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

The initial public offering price of our common stock will be substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on an assumed initial public offering price of \$15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$9.03 per share, representing the difference between our pro forma as adjusted net tangible book value per share after this offering and the initial public offering price per share. After this offering, we will also have outstanding options to purchase common stock with exercise prices lower than the initial public offering price. To the extent these outstanding options are exercised, there will be further dilution to investors in this offering. See the section titled "Dilution" for additional information.

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

You should not rely on an investment in our common stock to provide dividend income. We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Investors seeking cash dividends should not purchase our common stock in this offering.

***We have broad discretion in the use of our cash and cash equivalents, including the net proceeds from this offering, and may use them ineffectively, in ways in which you do not agree or in ways that do not increase the value of your investment.***

Our management will have broad discretion in the application of our cash and cash equivalents, including the net proceeds from this offering, and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a negative impact on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest our cash and cash equivalents, including the net proceeds from this offering, in a manner that does not produce income or that loses value. See the section titled "Use of Proceeds" for additional information.

***A significant portion of our total outstanding shares are 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 drop significantly, even if our business is performing well.***

Sales of a substantial number of shares of our common stock in the public market could occur at any time, subject to certain restrictions described below. These sales, or the perception in the market that holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering, we will have outstanding 17,988,189 shares of common stock based on the number of shares outstanding as of March 31, 2018 assuming no exercise by the underwriters' over-allotment option. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. The remaining 13,321,522 shares are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold after the offering as described in the sections titled "Shares Eligible for Future Sale" and "Underwriting." Moreover, upon the completion of this offering, holders of an aggregate of approximately shares of our common stock will have rights, subject to some 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 intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section titled "Underwriting."

***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,” or EGC, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We cannot predict whether investors will find our common stock less attractive because we will 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 share price may be more volatile. We may take advantage of some or all of these reporting exemptions until we are no longer an EGC. We will remain an EGC until the earlier of (i) five years following the completion of this offering, (ii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (iii) the last day of the first fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Under Section 107(b) of the JOBS Act, EGCs can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not EGCs.

***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.***

As a public company, and particularly after we are no longer an EGC, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and rules subsequently implemented by the SEC and The Nasdaq Stock Market LLC have imposed various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance.

Pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an EGC, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that

## [Table of Contents](#)

controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our consolidated financial statements.

***If we are unable to successfully remediate the existing material weakness in our internal control over financial reporting, the accuracy and timing of our financial reporting may be adversely affected.***

In connection with the audit of our consolidated financial statements as of and for the years ended December 31, 2016 and 2017, we identified a material weakness in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our consolidated financial statements will not be prevented or detected on a timely basis. The material weakness is related to a lack of sufficient number of qualified personnel within our accounting function to adequately segregate duties, a lack of sufficient review and approval of manual journal entries posted to the general ledger and a lack of adequate review procedures over general ledger account reconciliations.

We are implementing measures designed to improve our internal control over financial reporting to remediate this material weakness, including the following:

- we are in the process of adding additional qualified accounting personnel and segregating duties among accounting personnel; and
- we are formalizing our internal control documentation and strengthening supervisory reviews by our management.

These additional resources and procedures are designed to enable us to broaden the scope and quality of our internal review of underlying information related to financial reporting and to formalize and enhance our internal control procedures. With the oversight of senior management and our audit committee, we have begun taking steps and plan to take additional measures to remediate the underlying causes of the material weakness.

We, and our independent registered public accounting firm, were not required to perform an evaluation of our internal control over financial reporting as of December 31, 2017 in accordance with the provisions of the Sarbanes-Oxley Act. Accordingly, we cannot provide assurance that we have identified all, or that we will not in the future have additional, material weaknesses.

If we fail to remediate the material weakness or to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to accurately report our financial results, or report them within the timeframes required by law or stock exchange regulations. Failure to comply with Section 404 could also potentially subject us to sanctions or investigations by the SEC or other regulatory authorities. There is no assurance that we will be able to remediate the material weakness in a timely manner, or at all, or that in the future, additional material weaknesses will not exist or otherwise be discovered. If our efforts to remediate the material weakness identified are not successful, or if other material weaknesses or other deficiencies occur, our ability to accurately and timely report our financial position could be impaired.

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

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

- establish a classified board of directors such that not all members of the board are elected at one time;

## [Table of Contents](#)

- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a stockholder rights plan, or so-called "poison pill," that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 66 2/3% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our charter or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

***Our amended and restated certificate of incorporation provides 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 certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us or any of our directors, officers, employees or agents arising under the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws;
- any action or proceeding to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us or any of our directors, officers, employees or agents that is governed by the internal-affairs doctrine.

Our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America 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 certificate of incorporation 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 about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our strategy, future financial condition, future operations, projected costs, prospects, plans, objectives of management and expected market growth, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “positioned,” “potential,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology.

We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of known and unknown risks, uncertainties and assumptions, including risks described in the section titled “Risk Factors” and elsewhere in this prospectus, regarding, among other things:

- our plans to develop and commercialize our product candidates;
- the initiation, timing, progress and results of our current and future clinical trials and our research and development programs;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to successfully acquire or in-license additional product candidates on reasonable terms;
- our ability to maintain and establish collaborations or obtain additional funding;
- our ability to obtain regulatory approval of our current and future product candidates;
- our expectations regarding the potential market size and the rate and degree of market acceptance of such product candidates;
- our ability to fund our working capital requirements and expectations regarding the sufficiency of our capital resources;
- the implementation of our business model and strategic plans for our business and product candidates;
- our intellectual property position and the duration of our patent rights;
- developments or disputes concerning our intellectual property or other proprietary rights;
- our expectations regarding government and third-party payor coverage and reimbursement;
- our ability to compete in the markets we serve;
- the impact of government laws and regulations;
- developments relating to our competitors and our industry; and
- the factors that may impact our financial results.

The foregoing list of risks is not exhaustive. Other sections of this prospectus may include additional factors that could harm our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements.

In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. You should refer to the section titled “Risk Factors” for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, if our

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[Table of Contents](#)

forward-looking statements prove to be inaccurate, the inaccuracy may be material. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, do not protect any forward-looking statements that we make in connection with this offering.

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



## MARKET AND INDUSTRY DATA

Certain market and industry data included in this prospectus were obtained from independent third-party surveys, market research, publicly available information, reports of governmental agencies and industry publications and surveys. All of the market and industry data used in this prospectus involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although we are responsible for all of the disclosure contained in this prospectus and we believe the information from the industry publications and other third-party sources included in this prospectus is reliable, such information is inherently imprecise. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

## USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately \$61.3 million (or approximately \$71.1 million if the underwriters exercise in full their option to purchase up to 700,000 additional shares of common stock to cover over-allotments), based on an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease the net proceeds to us from this offering by \$4.3 million, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million in the number of shares of common stock offered by us, as set forth on the cover of this prospectus, would increase or decrease the net proceeds to us by \$14.0 million, assuming the assumed initial public offering price per share remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to increase our capitalization and financial flexibility, establish a public market for our common stock and to facilitate future access to the public equity markets by us, our employees and our stockholders, obtain additional capital to support our operations and increase our visibility in the marketplace.

As of March 31, 2018, we had cash and cash equivalents of \$47.1 million. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- approximately \$20 million to advance KZR-616 for the treatment of lupus and lupus nephritis through our KZR-616-002 Phase 1b/2 clinical trial;
- approximately \$14 million to advance KZR-616 for the treatment of idiopathic inflammatory myopathies and up to three additional autoimmune indications into a Phase 1b or Phase 2 clinical trial;
- approximately \$14 million to advance discovery and preclinical development in our protein secretion program; and
- the remainder to fund other research and development activities, working capital and other general corporate purposes.

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

This expected use of the net proceeds from this offering represents our intentions based on our current plans and business conditions, which could change in the future as our plans and business conditions evolve. Further, due to the uncertainties inherent in the drug development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes.

Our management will have broad discretion over the use of the net proceeds from this offering, and our investors will be relying on the judgment of our management regarding the application of the net proceeds of this offering. The amounts and timing of our expenditures will depend upon numerous factors including the results of our research and development efforts, the timing and success of preclinical studies and any ongoing clinical trials or clinical trials we may commence in the future, the timing of regulatory submissions and the amount of cash obtained through current and any future collaborations.

The expected net proceeds from this offering, together with our cash and cash equivalents, will not be sufficient for us to fund any of our product candidates through regulatory approval, and we will need to raise additional capital to complete the development and commercialization of our product candidates. We expect to finance our cash needs through a combination of equity offerings, debt financings and potential collaborations, and license and development agreements. We have based these estimates on assumptions that may prove to be incorrect, and we could expend our available capital resources at a rate greater than we currently expect.

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[Table of Contents](#)

Pending the use of the net proceeds from this offering as described above, we intend to invest the net proceeds in a variety of capital preservation instruments, including short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the United States government.

## DIVIDEND POLICY

We have never declared or paid 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, if any, to fund the development and expansion of our business. Any future determination related to dividend policy 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. In addition, our ability to pay cash dividends on our capital stock in the future may be limited by the terms of any future debt or preferred securities we issue or any credit facilities we enter into.

## CAPITALIZATION

The following table sets forth our cash and cash equivalents, and our capitalization as of March 31, 2018 on:

- an actual basis;
- a pro forma basis, giving effect to the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 12,263,126 shares of our common stock upon the completion of this offering; and
- a pro forma as adjusted basis, giving effect to the pro forma adjustments discussed above, and giving further effect to: (i) the sale of 4,666,667 shares of our common stock in this offering at an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us; and (ii) the filing and effectiveness of our amended and restated certificate of incorporation.

You should read this table together with the sections titled “Selected Consolidated Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus.

(In thousands, except share and per share amounts)	AS OF MARCH 31, 2018		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED <sup>(1)</sup> (unaudited)
Cash and cash equivalents	\$ 47,085	\$ 47,085	\$ 108,385
Redeemable convertible preferred stock, \$0.001 par value, 75,533,240 shares authorized; 12,263,126 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma or pro forma as adjusted	\$ 77,931	\$ —	\$ —
Stockholders’ (deficit) equity:			
Preferred stock, \$0.001 par value, no shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding pro forma; 10,000,000 shares authorized and no shares issued and outstanding pro forma and pro forma as adjusted	—	—	—
Common stock, \$0.001 par value, 96,000,000 shares authorized; 1,058,396 shares issued and outstanding, actual; 125,000,000 shares authorized, 13,321,522 shares issued and outstanding, pro forma; 17,988,189 shares issued and outstanding, pro forma as adjusted	1	13	18
Additional paid-in capital	619	78,538	139,833
Accumulated other comprehensive loss	(134)	(134)	(134)
Accumulated deficit	(30,975)	(30,975)	(30,975)
Total stockholders’ (deficit) equity	<u>(30,489)</u>	<u>47,442</u>	<u>108,742</u>
Total capitalization	<u>\$ 47,442</u>	<u>\$ 47,442</u>	<u>\$ 108,742</u>

- (1) Each \$1.00 increase or decrease in the assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease each of pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ (deficit) equity and total capitalization by \$4.3 million, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million in the number of shares of common stock offered by us would increase or decrease each of pro forma as adjusted cash and cash equivalents, additional paid-in capital, total stockholders’ (deficit) equity and total capitalization by \$14.0 million, assuming that the assumed initial public offering price remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

## [Table of Contents](#)

The number of shares of common stock in the table above is based on 13,321,522 shares of common stock outstanding as of March 31, 2018, which gives effect to the pro forma transactions described above and excludes:

- 1,354,965 shares of our common stock issuable upon the exercise of outstanding stock options as of March 31, 2018, at a weighted-average exercise price of \$1.68 per share;
- 784,507 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2018 at an exercise price of \$5.91 per share;
- 4,000,000 shares of our common stock reserved for future issuance under our 2018 Plan, which will become effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our 2018 Plan; and
- 200,000 shares of our common stock reserved for future issuance under our ESPP, which will become effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our ESPP.

## DILUTION

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

Our historical net tangible book deficit as of March 31, 2018 was \$(31.8) million, or \$(30.05) per share of our common stock. Our historical net tangible book deficit represents our total tangible assets (which excludes deferred offering costs) less total liabilities and redeemable convertible preferred stock. Historical net tangible book deficit per share is our historical net tangible book deficit divided by the number of shares of our common stock outstanding as of March 31, 2018.

Our pro forma net tangible book value as of March 31, 2018 was \$46.1 million, or \$3.46 per share of our common stock, which gives effect to the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 12,263,126 shares of our common stock upon the completion of this offering. Pro forma net tangible book value per share is our pro forma net tangible book value divided by the number of shares of our common stock deemed to be outstanding as of March 31, 2018.

After giving effect to the sale of 4,666,667 shares of common stock in this offering at an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2018 would have been \$107.4 million, or \$5.97 per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$2.51 per share to our existing stockholders and an immediate dilution of \$9.03 per share to new investors participating in this offering.

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

Assumed initial public offering price per share	\$15.00
Historical net tangible book deficit per share as of March 31, 2018	\$(30.05)
Pro forma increase in net tangible book value per share as of March 31, 2018 attributable to pro forma transactions described above	<u>33.51</u>
Pro forma net tangible book value per share as of March 31, 2018	3.46
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	<u>2.51</u>
Pro forma as adjusted net tangible book value per share after this offering	5.97
Dilution per share to new investors participating in this offering	<u>\$ 9.03</u>

Each \$1.00 increase or decrease in the assumed initial public offering price of \$15.00, the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease our pro forma as adjusted net tangible book value per share after this offering by \$0.24 per share and the dilution per share to new investors participating in this offering by \$0.76 per share, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, an increase of 1.0 million in the number of shares of common stock offered by us would increase the pro forma as adjusted net tangible book value after this offering by \$0.42 per share and decrease the dilution per share to new investors participating in this offering by \$0.42 per share, and a decrease of 1.0 million in the number of shares of common stock offered by us would decrease the pro forma as adjusted net tangible book value by \$0.47 per share, and increase the dilution per share to new investors in this offering by \$0.47 per share, assuming that the assumed initial public offering price remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.



## [Table of Contents](#)

If the underwriters exercise in full their option to purchase up to 700,000 additional shares of common stock to cover over-allotments, the pro forma as adjusted net tangible book value per share after giving effect to this offering would be \$6.27 per share and dilution to new investors participating in this offering would be \$8.73 per share.

The following table summarizes, as of March 31, 2018, on the pro forma as adjusted basis described above:

- the total number of shares of common stock purchased from us by our existing stockholders and by new investors participating in this offering;
- the total consideration paid to us by our existing stockholders and by new investors participating in this offering, at the assumed initial public offering price of \$15.00 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us; and
- the average price per share paid by existing stockholders and by new investors participating in this offering.

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	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing stockholders	13,321,522	74%	\$ 78,663,976 <sup>(1)</sup>	53%	\$ 5.91
New investors	4,666,667	26	70,000,005	47	\$ 15.00
Total	<u>17,988,189</u>	<u>100%</u>	<u>\$148,663,981</u>	<u>100%</u>	

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(1) Includes non-cash consideration received in connection with the Onyx license agreement.

If the underwriters exercise their option to purchase additional shares in full, our existing stockholders would own 71% and our new investors would own 29% of the total number of shares of our common stock outstanding upon the completion of this offering.

The foregoing discussion and tables are based on 13,321,522, shares of common stock outstanding as of March 31, 2018, which gives effect to the pro forma transactions described above and excludes:

- 1,354,965 shares of our common stock issuable upon the exercise of outstanding stock options as of March 31, 2018, at a weighted-average exercise price of \$1.68 per share;
- 784,507 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2018 at an exercise price of \$5.91 per share;
- 4,000,000 shares of our common stock reserved for future issuance under our 2018 Plan, which became effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our 2018 Plan; and
- 200,000 shares of our common stock reserved for future issuance under our ESPP, which became effective immediately prior to the execution of the underwriting agreement related to this offering, as well as any future increases in the number of shares of common stock reserved for issuance under our ESPP.

Effective upon completion of this offering, 4,000,000 shares of our common stock will be reserved for future issuance under our 2018 Plan and 200,000 shares of our common stock will be reserved for future issuance under our ESPP, and the number of reserved shares under each such plan will also be subject to automatic annual increases in accordance with the terms of the plans. New awards that we may grant under our 2018 Plan or shares issued under our ESPP will further dilute investors purchasing common stock in this offering.

## SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data together with the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes included elsewhere in this prospectus. The selected consolidated financial data included in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and the related notes included elsewhere in this prospectus.

The following tables set forth our selected consolidated statement of operations data for the years ended December 31, 2016 and 2017, and our selected consolidated balance sheet data as of December 31, 2016 and 2017, all of which has been derived from our audited consolidated financial statements appearing elsewhere in this prospectus. The following selected consolidated statement of operations data for the three months ended March 31, 2017 and 2018 and the selected consolidated balance sheet data as of March 31, 2018 are derived from our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus. The unaudited interim condensed consolidated financial statements were prepared on a basis consistent with our audited consolidated financial statements and include, in management’s opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of the financial information set forth in those statements. Our historical results are not necessarily indicative of the results that may be expected for any period in the future and our interim results are not necessarily indicative of our expected results for the year ending December 31, 2018.

(in thousands except share and per share data)	YEAR ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	2016	2017	2017	2018
			(unaudited)	
<b>Summary of Consolidated Operations Data:</b>				
Operating expenses:				
Research and development	\$ 7,373	\$ 6,469	\$ 1,831	\$ 3,572
General and administrative	1,617	2,280	426	1,514
<b>Total operating expenses</b>	<b>8,990</b>	<b>8,749</b>	<b>2,257</b>	<b>5,086</b>
Loss from operations	(8,990)	(8,749)	(2,257)	(5,086)
Interest income	—	232	—	139
Net loss	<b>\$ (8,990)</b>	<b>\$ (8,517)</b>	<b>\$ (2,257)</b>	<b>\$ (4,947)</b>
Net loss per share: (1)				
Basic and diluted	<b>\$ (26.56)</b>	<b>\$ (14.21)</b>	<b>\$ (4.43)</b>	<b>\$ (6.53)</b>
Weighted average shares used in computing net loss per share: (1)				
Basic and diluted	<b>338,446</b>	<b>599,291</b>	<b>509,143</b>	<b>757,399</b>
Pro forma net loss per share (unaudited): (1)				
Basic and diluted		<b>\$ (0.87)</b>		<b>\$ (0.38)</b>
Weighted average shares outstanding used in computing pro forma net loss per share (unaudited): (1)				
Basic and diluted		<b>9,762,770</b>		<b>13,020,525</b>

(1) See Notes 2, 11 and 12 to our audited consolidated financial statements and Notes 2 and 5 to our unaudited interim condensed consolidated financial statements included elsewhere in this prospectus for an explanation of the calculations of our basic and diluted net loss per share, pro forma net loss per share and the weighted-average number of shares used in the computation of the per share amounts.

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(in thousands)	AS OF DECEMBER 31,		AS OF
	2016	2017	MARCH 31, 2018 (unaudited)
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 9,747	\$ 51,033	\$ 47,085
Working capital	9,836	50,842	45,636
Total assets	11,424	54,222	54,251
Redeemable convertible preferred stock	28,176	77,931	77,931
Accumulated deficit	(17,511)	(26,028)	(30,975)
Total stockholders' deficit	(17,428)	(25,687)	(30,489)

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## 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 titled "Selected Consolidated Financial Data" and the consolidated financial statements and the related notes included elsewhere in this prospectus. In addition to historical financial information, the following discussion contains forward-looking statements based upon our current plans, expectations and beliefs that involve risks, uncertainties and assumptions. Our actual results may differ materially from those described in or implied by these forward-looking statements as a result of many factors, including those set forth under the section titled "Risk Factors" and in other parts of this prospectus.*

### Overview

We are a clinical-stage biotechnology company, discovering and developing novel small molecule therapeutics to treat unmet needs in autoimmunity and cancer. Our lead product candidate, KZR-616, a first-in-class selective immunoproteasome inhibitor, has completed testing in healthy volunteers and is now enrolling a Phase 1b/2 clinical trial in lupus and lupus nephritis. We believe that the immunoproteasome is a validated target for the treatment of a wide variety of autoimmune diseases, given the compelling published activity seen with proteasome inhibitors administered to patients with severe autoimmune diseases. Our Phase 1a clinical trial results provide evidence that KZR-616 avoids the side effects caused by non-selective proteasome inhibitors, side effects that prevent them from being developed as a treatment in autoimmunity. Initial top-line results from the Phase 1b portion of our trial are expected in 2019, and we plan to initiate up to four additional trials in autoimmune diseases in 2019. We are also leveraging our protein secretion pathway research platform to discover and develop small molecule therapies targeting cancer and immuno-oncology.

Since the commencement of our operations in mid-2015, we have devoted substantially all of our resources to performing research and development activities in support of our product development efforts, hiring personnel, raising capital to support and expand such activities and providing general and administrative support for these operations. We do not have any products approved for sale and have not generated any revenue from product sales. We have funded our operations to date primarily from the issuance and sale of convertible preferred stock.

Since our inception, we have incurred significant operating losses. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of one or more of our current or future product candidates and programs. Our net losses were \$9.0 million, \$8.5 million and \$4.9 million for the years ended December 31, 2016 and 2017 and the three months ended March 31, 2018, respectively, and we expect to continue to incur significant losses for the foreseeable future. As of March 31, 2018, we had an accumulated deficit of \$31.0 million. We anticipate that a substantial portion of our capital resources and efforts in the foreseeable future will be focused on discovering, completing the necessary development, obtaining regulatory approval and preparing for potential commercialization of our product candidates.

We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. Our net losses may fluctuate significantly from period to period, depending on the timing of our planned clinical trials and expenditures on other research and development activities. We expect our expenses will increase substantially over time as we:

- continue the ongoing and planned development of KZR-616;
- seek to discover and develop additional product candidates;
- initiate preclinical studies and clinical trials for any additional product candidates that we may pursue in the future;
- establish a sales, marketing, manufacturing and distribution infrastructure to commercialize any product candidate for which we may obtain marketing approval;
- continue to build a portfolio of product candidates through the acquisition or in-license of drugs, product candidates or technologies;

## [Table of Contents](#)

- seek marketing approvals for KZR-616 and any future product candidates that successfully complete clinical trials;
- maintain, protect and expand our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- implement operational, financial and management systems; and
- attract, hire and retain additional administrative, clinical, regulatory and scientific personnel.

Furthermore, following the closing of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, investor relations and other expenses that we did not incur as a private company.

### Financial Operations Overview

#### Research and Development Expenses

Research and development expenses consist primarily of costs incurred for the development of our product candidates, which include:

- employee-related expenses, which include salaries, benefits and stock-based compensation;
- fees paid to consultants for services directly related to our product development and regulatory effort;
- expenses incurred under agreements with third-party contract organizations, investigative clinical trial sites and consultants that conduct research and development activities on our behalf;
- costs associated with preclinical studies and clinical trials;
- costs associated with technology and intellectual property licenses;
- the costs related to production of clinical supplies; and
- facilities and other allocated expenses, which include expenses for rent and other facility related costs and other supplies.

We expense all research and development costs in the periods in which they are incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors, collaborators and third-party service providers.

We are eligible under the AusIndustry Research and Tax Development Tax Incentive Program to obtain a cash amount from the Australian Taxation Office. The tax incentive is available to us on the basis of specific criteria with which we must comply related to research and development expenditures in Australia. These research and development tax incentives are recognized as contra research and development expense when the right to receive has been attained and funds are considered to be collectible. The amounts are determined based on a cost-reimbursement basis, and the incentive is related to our research and development expenditures and is due to us regardless of whether any Australian tax is owed. Amounts related to the AusIndustry Research and Development Tax Incentive Program are recognized when there is reasonable assurance that the incentive will be received, the relevant expenditure has been incurred by our Australian subsidiary and the amount of the consideration can be reliably measured.

The following table summarizes our research and development expenses incurred during the respective periods (in thousands):

	YEAR ENDED DECEMBER 31,		THREE MONTHS ENDED, MARCH 31,	
	2016	2017	2017	2018
Discovery research	\$ 5,680	\$ 4,545	\$ 1,465	\$ 2,270
Clinical development	1,133	2,010	601	1,030
Manufacturing related expenses	945	413	39	275
Less: Australian Research and Development Tax Incentive Program	(385)	(499)	(274)	(3)
Total research and development expenses	<u>\$ 7,373</u>	<u>\$ 6,469</u>	<u>\$ 1,831</u>	<u>\$ 3,572</u>

## [Table of Contents](#)

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in research and development activities related to developing our product candidate and our preclinical programs and as they advance into later stages of development. The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming, and the successful development of our product candidates is highly uncertain. As a result, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

### **General and Administrative Expenses**

Our general and administrative expenses consist primarily of personnel costs, allocated facilities costs and other expenses for outside professional services, including legal, human resource, audit and accounting services. Personnel costs consist of salaries, benefits and stock-based compensation. We expect to incur additional expenses as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, The Nasdaq Stock Market and any other securities exchange on which our securities are traded, additional insurance expenses, investor relations activities and other administrative and professional services. We also expect to increase the size of our administrative function to support the growth of our business.

### **Interest Income**

Our interest income consists of interest income earned on our cash and cash equivalents.

## **Results of Operations**

### **Comparison of the Three Months Ended March 31, 2017 and 2018**

(dollars in thousands)	THREE MONTHS ENDED		\$ CHANGE	% CHANGE
	MARCH 31,			
	2017	2018		
Operating expenses:				
Research and development	\$ 1,831	\$ 3,572	\$ 1,741	95%
General and administrative	426	1,514	1,088	255
Total operating expenses	2,257	5,086	2,829	125
Loss from operations	(2,257)	(5,086)	(2,829)	125
Interest income	—	139	139	100
Net loss	\$ (2,257)	\$ (4,947)	\$ (2,690)	(119)%

### *Research and Development Expenses*

Research and development expenses increased by \$1.7 million, or 95%, for the three months ended March 31, 2018, compared to the three months ended March 31, 2017. The increase was due to an increase of \$0.5 million in pharmacology and toxicology studies, an increase of \$0.3 million in clinical trial costs due to the initiation of the Phase 1b clinical trial of KZR-616, an increase of \$0.2 million in medicinal chemistry efforts related to our protein secretion discovery program, an increase of \$0.2 million in personnel expenses due to an increase in headcount and an increase of \$0.1 million in facility-related expenses due to the move to our new location. In addition, the Australian Research and Development Tax Incentive credit earned for the three months ended March 31, 2018 decreased by \$0.3 million compared to the same period in 2017, which is recorded as a reduction in our research and development expenses.

### *General and Administrative Expenses*

General and administrative expenses increased by \$1.1 million, or 255%, for the three months ended March 31, 2018, compared to the three months ended March 31, 2017. The increase was due to an increase of \$0.5 million in legal and professional fees related to our intellectual property activities and preparing to be a public company, an increase of \$0.3 million in payroll expenses related to an increase in headcount and increased salaries and an increase of \$0.3 million in facility-related expenses due to the move to our new location and disposal of property and equipment from our prior facility.

## [Table of Contents](#)

### *Interest Income*

Interest income increased by \$0.1 million for the three months ended March 31, 2018, compared to the three months ended March 31, 2017. The increase was attributable to interest income earned on higher cash equivalents balance resulting from our Series B convertible preferred stock financing in June and July 2017.

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

(dollars in thousands)	YEAR ENDED DECEMBER 31,		\$ CHANGE	% CHANGE
	2016	2017		
Operating expenses:				
Research and development	\$ 7,373	\$ 6,469	\$ (904)	(12)%
General and administrative	1,617	2,280	663	41
Total operating expenses	8,990	8,749	(241)	(3)
Loss from operations	(8,990)	(8,749)	241	(3)
Interest income	—	232	232	100
Net loss	<u>\$(8,990)</u>	<u>\$(8,517)</u>	<u>\$ 473</u>	(5)

### *Research and Development Expenses*

Research and development expenses decreased by \$0.9 million, or 12%, for the year ended December 31, 2017, compared to the year ended December 31, 2016. The decrease was due to a reduction of \$1.9 million in the costs of GLP toxicology studies, which were mostly completed in 2016, and a reduction of \$0.5 million in contract manufacturing related process development costs. These decreases were partially offset by an increase of \$0.9 million in clinical trial costs due to the initiation of the Phase 1 clinical trial of KZR-616, an increase of \$0.5 million in personnel expenses due to an increase in headcount and an increase of \$0.3 million in medicinal chemistry efforts related to our protein secretion discovery program. In addition, the amount of our Australian Research and Development Tax Incentive increased by \$0.1 million for the year ended December 31, 2017.

### *General and Administrative Expenses*

General and administrative expenses increased by \$0.7 million, or 41%, for the year ended December 31, 2017, compared to the year ended December 31, 2016. The increase was primarily due to an increase of \$0.3 million in payroll expenses related to an increase in headcount and increased salaries and bonuses and an increase of \$0.2 million in legal and professional fees related to our intellectual property activities and preparation to become a public company.

### *Interest Income*

Interest income increased by \$0.2 million for the year ended December 31, 2017, compared to the year ended December 31, 2016. The increase was attributable to interest income earned on cash equivalents due to additional funds received from our Series B redeemable convertible preferred stock financing in June and July 2017.

## **Liquidity and Capital Resources**

### **Overview**

Since inception and through March 31, 2018, we have funded our operations primarily by net proceeds of \$72.6 million from the sale of our convertible preferred stock. At March 31, 2018, we had available cash and cash equivalents of \$47.1 million.

We have incurred operating losses and experienced negative operating cash flows since our inception and anticipate that we will continue to incur losses for at least the foreseeable future. Our net loss was \$4.9 million for the three months ended March 31, 2018 and, as of March 31, 2018, we had an accumulated deficit of \$31.0 million.

We believe that our cash and cash equivalents as of March 31, 2018 will be sufficient to meet our projected operating requirements at least through the next 12 months from the date the financial statements were issued. We

## [Table of Contents](#)

have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

### **Funding Requirements**

Our primary use of cash is to fund operating expenses, primarily research and development expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable, accrued expenses and prepaid expenses.

We will require additional financing to fund working capital and pay our obligations. We may pursue financing opportunities through the issuance of debt or equity. There can be no assurance that we will be successful in acquiring additional funding at levels sufficient to fund our operations or on terms favorable to us or at all. Our future funding requirements will depend on many factors, including the following:

- the progress, timing, scope, results and costs of our clinical trials and preclinical studies for our product candidates, including the ability to enroll patients in a timely manner for our clinical trials;
- the costs of obtaining clinical and commercial supplies for KZR-616 and any other product candidates we may identify and develop;
- the cost, timing and outcomes of regulatory approvals;
- the extent to which we may acquire or in-license other product candidates and technologies;
- the cost of attracting, hiring and retaining qualified personnel;
- our ability to successfully commercialize any product candidates for which we obtain regulatory approval; and
- the cost of preparing, filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Further, our operating plan may change, and we may need additional funds to meet operational needs and capital requirements for clinical trials and other research and development expenditures. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical studies.

If we need to raise additional capital to fund our operations, funding may not be available to us on acceptable terms, or at all. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our preclinical studies, clinical trials, research and development programs or commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, collaborations and other licensing arrangements. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

### **Cash Flows**

The following summarizes our cash flows for the periods indicated (in thousands):

	YEAR ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	2016	2017	2017	2018
Cash used in operating activities	\$ (9,760)	\$ (8,109)	\$ (2,012)	\$ (3,766)
Cash used in investing activities	(132)	(389)	—	(195)
Cash provided by financing activities	36	49,755	—	25
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(150)	29	—	(12)
Net (decrease) increase in cash and cash equivalents and restricted cash	<u>\$ (10,006)</u>	<u>\$ 41,286</u>	<u>\$ (2,012)</u>	<u>\$ (3,948)</u>



**Cash Flows from Operating Activities**

During the three months ended March 31, 2018, cash used in operating activities was \$3.8 million, which consisted of a net loss of \$4.9 million, adjusted by non-cash charges of \$0.3 million and a net change of \$0.8 million in our net operating assets and liabilities. The non-cash charges consisted of \$0.1 million for depreciation and amortization, \$0.1 million for stock-based compensation expense and \$0.1 million for loss on disposal of property and equipment. The change in our net operating assets and liabilities was primarily due to an increase of \$0.6 million in prepaid expenses, including advance payments for clinical activities, offset by an increase of \$1.1 million in accounts payable, accrued expenses and other liabilities due to professional services, and clinical expenditures as well as an increase of \$0.3 million related to the lease incentive for our new facility.

During the three months ended March 31, 2017, cash used in operating activities was \$2.0 million, which consisted of a net loss of \$2.3 million, adjusted by non-cash charges of \$0.1 million and a net change of \$0.2 million in our net operating assets and liabilities. The non-cash charges consisted of \$0.1 million for depreciation and amortization and stock-based compensation expense. The change in our net operating assets and liabilities was primarily due to an increase of \$0.3 million in other current assets primarily due to the Australian Research and Development Tax Incentive receivable, offset by an increase of \$0.4 million in accounts payable due to the timing of payments.

During the year ended December 31, 2017, cash used in operating activities was \$8.1 million, which consisted of a net loss of \$8.5 million, adjusted by non-cash charges of \$0.4 million. The non-cash charges are primarily comprised of \$0.2 million for depreciation and amortization and of \$0.2 million for stock-based compensation expense. The change in our net operating assets and liabilities was primarily due to an increase in payroll-related accruals of \$0.4 million and clinical expenditures of \$0.3 million and an increase in prepaid expenses of \$0.6 million, including advance payments for clinical activities.

During the year ended December 31, 2016, cash used in operating activities was \$9.8 million, which consisted of a net loss of \$9.0 million, adjusted by non-cash charges of \$0.3 million and a net change of \$1.1 million in our net operating assets and liabilities. The non-cash charges are primarily comprised of \$0.2 million for depreciation and amortization and \$0.1 million for stock-based compensation expense. The change in our net operating assets and liabilities was primarily due to an increase of \$0.5 million in accounts payable primarily related to clinical development expenditures and \$0.4 million for research and development tax incentive receivable.

**Cash Flows from Investing Activities**

During the three months ended March 31, 2018, cash used in investing activities was \$0.2 million, related to the purchase of property and equipment, compared to zero for the three months ended March 31, 2017.

During the years ended December 31, 2017 and 2016, cash used in investing activities was \$0.4 million and \$0.1 million, respectively, related to the purchase of property and equipment.

**Cash Flows from Financing Activities**

During the three months ended March 31, 2018, cash provided by financing activities was \$25,000, consisting of proceeds from the issuance of common stock upon the exercise of stock options, compared to zero for the three months ended March 31, 2017.

During the year ended December 31, 2017, cash provided by financing activities was \$49.8 million from the issuance of Series B redeemable convertible preferred stock.

During the year ended December 31, 2016, cash provided by financing activities was \$36,000 of proceeds from the issuance of common stock upon the exercise of stock options.

**Contractual Obligations and Other Commitments**

The following table summarizes our contractual obligations as of December 31, 2017 (in thousands):

	PAYMENTS DUE BY PERIOD				TOTAL
	LESS THAN 1 YEAR	1 TO 3 YEARS	3 TO 5 YEARS	MORE THAN 5 YEARS	
<b>Contractual obligations:</b>					
Operating lease (1)	\$ 1,974	\$ 4,509	\$ 4,052	\$ 4,664	\$ 15,199

(1) Amounts in the table represent the operating lease obligations of our space at 300 Utah Avenue, South San Francisco, California and of the office and laboratory space at 4000 Shoreline Court, South San Francisco, California. We entered into the 4000 Shoreline lease on August 16, 2017. Subsequent to December 31, 2017, the 300 Utah lease was terminated effective April 1, 2018 and therefore we will not incur \$1.0 million of lease costs included in the table above. As such, we are no longer obligated to pay the remainder of rent, nor are we required to pay any early termination fee.

Except as disclosed in the table above, we have no long-term debt or capital leases and no material non-cancelable purchase commitments with service providers, as we have generally contracted on a cancelable, purchase order basis.

The contractual obligations table does not include any potential contingent payments upon the achievement by us of clinical, regulatory and commercial events, as applicable, or royalty payments that we may be required to make under license agreements we have entered into or may enter into with various entities pursuant to which we have in-licensed certain intellectual property, including our license agreement with Onyx. Under the Onyx license agreement, we are obligated to pay Onyx milestone payments of up to \$172.5 million in the aggregate upon the achievement of certain development, regulatory and sales milestones. We excluded the contingent payments given that the timing and amount (if any) of any such payments cannot be reasonably estimated at this time. See the section titled "Business—License Agreement with Onyx" for additional information.

**Off-Balance Sheet Arrangements**

We have not entered into any off-balance sheet arrangements and do not have holdings in any variable interest entities.

**Quantitative and Qualitative Disclosures about Market Risk**

The primary objectives of our investment activities are to ensure liquidity and to preserve capital. We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. We had cash and cash equivalents of \$51.0 million and \$47.1 million as of December 31, 2017 and March 31, 2018, respectively, which consisted of bank deposits and highly liquid money market funds. Historical fluctuations in interest rates have not been significant for us. We had no outstanding debt as of December 31, 2017 and March 31, 2018. Due to the short-term maturities 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 equivalents. To minimize the risk in the future, we intend to maintain our portfolio of cash equivalents in institutional market funds that are composed of U.S. Treasury and U.S. Treasury-backed repurchase agreements or short-term U.S. Treasury securities.

Approximately \$0.7 million of our cash balance is located in Australia as of December 31, 2017 and March 31, 2018. Our expenses, except those related to our Australian operations, are generally denominated in U.S. dollars. For our operations in Australia, the majority of the expenses are denominated in Australian dollars. To date, we have not had a formal hedging program with respect to foreign currency. A 10% increase or decrease in current exchange rates would not have a material effect on our consolidated financial results.

**Critical Accounting Policies and Estimates**

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted

accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the 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.

While our significant accounting policies are described in more detail in Note 2 to our consolidated financial statements appearing elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

**Accrued Research and Development Costs**

We record accrued expenses for estimated costs of our research and development activities conducted by third-party service providers, which include the conduct of clinical studies, contract manufacturing activities and preclinical studies. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced and include these costs in accrued liabilities in the consolidated balance sheets and within research and development expense in the consolidated statement of operations. These costs are a significant component of our research and development expenses. We record accrued expenses for these costs based on factors such as estimates of the work completed and in accordance with agreements established with these third-party service providers. Any payments made in advance of services provided are recorded as prepaid assets, which are expensed as the contracted services are performed.

We estimate the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. We make significant judgments and estimates in determining the accrued balance in each reporting period. As actual costs become known, we adjust our accrued estimates. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed, the number of patients enrolled and the rate of patient enrollment may vary from our estimates and could result in us reporting amounts that are too high or too low in any particular period. Our accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. For the periods presented, we have experienced no material differences between our accrued expenses and actual expenses.

**Stock-Based Compensation**

We recognize compensation costs related to stock options granted to employees and directors based on the estimated fair value of the awards on the date of grant. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of the stock-based awards is recognized on a straight-line basis over the requisite service periods, which are generally the vesting period of the respective awards.

The Black-Scholes option-pricing model requires the use of subjective assumptions which determine the fair value of stock-based awards, including the expected term and the price volatility of the underlying stock. These assumptions include:

- *Expected term*—The expected term represents the period that the stock-based awards are expected to be outstanding. We used the simplified method, which calculates the expected term as the average of the time to vesting and the contractual life of the options. For non-employees, we use the contractual term.
- *Expected volatility*—Since we are not yet a public company and do not have any trading history for our common stock, the expected volatility was estimated based on the average historical volatilities of common stock of comparable publicly traded entities over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their size, stage in the life cycle or area of specialty. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.

## [Table of Contents](#)

- *Risk-free interest rate*—The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the expected term of the awards.
- *Expected dividend*—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

We will continue to use judgment in evaluating the expected term and expected volatility utilized for our stock-based compensation calculations on a prospective basis.

Historically, for all periods prior to this offering, the fair value of the shares of common stock underlying our share-based awards were estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants, our board of directors considered, among other things, timely valuations of our common stock prepared by unrelated third-party valuation firms in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, and a number of objective and subjective factors including important developments in our operations, sales of convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of our common stock, among other factors. After the closing of this offering, our board of directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of grant.

The intrinsic value of all outstanding options as of March 31, 2018 was \$18.0 million based on the estimated fair value of our common stock of \$15.00 per share, the midpoint of the price range set forth on the cover of this prospectus.

### **Recent Accounting Pronouncements**

See Note 2 to our Consolidated Financial Statements “Summary of Significant Accounting Policies—Recently Accounting Pronouncements” for more information.

### **Internal Control over Financial Reporting**

In connection with the audit of our consolidated financial statements as of and for the years ended December 31, 2016 and 2017, we identified a material weakness in our internal control over financial reporting. The material weakness related to a lack of sufficient number of qualified personnel within our accounting function to adequately segregate duties, a lack of sufficient review and approval of manual journal entries posted to the general ledger and a lack of adequate review procedures over general ledger account reconciliations.

We are implementing measures designed to improve our internal control over financial reporting to remediate this material weakness, including the following:

- we are in the process of adding additional qualified accounting personnel and segregating duties among accounting personnel; and
- we are formalizing our internal control documentation and strengthening supervisory reviews by our management.

These additional resources and procedures are designed to enable us to broaden the scope and quality of our internal review of underlying information related to financial reporting and to formalize and enhance our internal control procedures. With the oversight of senior management and our audit committee, we have begun taking steps and plan to take additional measures to remediate the underlying causes of the material weakness.

We, and our independent registered public accounting firm, were not required to perform an evaluation of our internal control over financial reporting as of December 31, 2017 in accordance with the provisions of the Sarbanes-Oxley Act. Accordingly, we cannot provide assurance that we have identified all, or that we will not in the future have additional, material weaknesses. Material weaknesses may still exist when we report on the effectiveness of our internal control over financial reporting as required by reporting requirements under Section 404 of the Sarbanes-Oxley Act after the completion of this offering.

### **JOBS Act Accounting Election**

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

In addition, we intend to rely on the other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, if as an “emerging growth company” we intend to rely on such exemptions, we are not required to, among other things, (i) provide an auditor’s attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) 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 (auditor discussion and analysis) and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer’s compensation to median employee compensation. These exemptions will apply for a period of five years following the completion of this offering or until we no longer meet the requirements of being an emerging growth company, whichever is earlier.

**BUSINESS**

**Overview**

We are a clinical-stage biotechnology company, discovering and developing novel small molecule therapeutics to treat unmet needs in autoimmunity and cancer. Our lead product candidate, KZR-616, a first-in-class selective immunoproteasome inhibitor, has completed testing in healthy volunteers and is now enrolling a Phase 1b/2 clinical trial in lupus and lupus nephritis. We believe that the immunoproteasome is a validated target for the treatment of a wide variety of autoimmune diseases, given the compelling published activity seen with proteasome inhibitors administered to patients with severe autoimmune diseases. Our Phase 1a clinical trial results provide evidence that KZR-616 avoids the side effects caused by non-selective proteasome inhibitors, side effects that prevent them from being developed as a treatment in autoimmunity. Initial top-line results from the Phase 1b portion of our trial are expected in 2019, and we plan to initiate up to four additional trials in autoimmune diseases in 2019. We are also leveraging our protein secretion pathway research platform to discover and develop small molecule therapies targeting cancer and immuno-oncology.

We acquired exclusive worldwide rights to KZR-616 and an accompanying library of similar molecules pursuant to a license agreement with Onyx Therapeutics, Inc., or Onyx, a wholly owned subsidiary of Amgen, Inc., or Amgen, in June 2015. Patent coverage for KZR-616 extends to at least 2034. We intend to develop KZR-616 to address underserved autoimmune diseases, including lupus nephritis and idiopathic inflammatory myopathies, where we have planned initial Phase 2 clinical trials, as well as other autoimmune indications. Our first Phase 2 clinical trial is intended to evaluate KZR-616 for the treatment of lupus nephritis, which currently has no FDA-approved drugs.

**Our Pipeline**

The following table sets forth the status and initial focus of our lead product candidate:

Program	Therapeutic Indication	Development Stage & Anticipated Milestones						
		Discovery	Preclinical	Phase 1a	Phase 1b	Phase 2	Phase 3	Anticipated Milestones
KZR-616	Systemic lupus erythematosus (SLE)	[Progress bar through Discovery, Preclinical, Phase 1a, and Phase 1b]						Phase 1b initial top-line data H1 2019
	Lupus nephritis	[Progress bar through Discovery, Preclinical, Phase 1a, and Phase 1b]						Initiate Phase 2 H1 2019
	Idiopathic inflammatory myopathies	[Progress bar through Discovery, Preclinical, and Phase 1a]						Initiate Phase 2 in 2019
	Orphan / unmet need autoimmune	[Progress bar through Discovery, Preclinical, and Phase 1a]						Potential to initiate Phase 1b or Phase 2 in 2019
	Orphan / unmet need autoimmune	[Progress bar through Discovery, Preclinical, and Phase 1a]						Potential to initiate Phase 1b or Phase 2 in 2019
	Orphan / unmet need autoimmune	[Progress bar through Discovery, Preclinical, and Phase 1a]						Potential to initiate Phase 1b or Phase 2 in 2019

**Our Strategy**

Our strategy is to focus on the discovery, development and commercialization of novel small molecule therapeutics to address unmet medical needs. Key elements of our strategy are to:

- **Rapidly advance KZR-616 in multiple autoimmune indications, including orphan diseases and other areas of unmet needs.** We believe that KZR-616 has the potential to treat a wide range of autoimmune diseases. We are currently enrolling a Phase 1b/2 clinical trial in patients with lupus and lupus nephritis and plan to initiate additional Phase 1b or Phase 2 clinical trials in up to four other autoimmune indications in 2019. Assuming positive results from these trials, we intend to explore registration-enabling trials in each

indication. We believe we could be eligible for Breakthrough Therapy designation, Fast Track designation or orphan drug designation, which, if granted by the U.S. Food and Drug Administration, or FDA, may accelerate clinical development and regulatory review.

- **Identify small molecule disruptors of the protein secretion pathway and advance them into IND-enabling studies.** We believe we are the only company exploring the therapeutic potential of modulating the protein secretion pathway and the Sec61 translocon. We intend to leverage this platform to identify product candidates for the treatment of diseases with significant clinical need, initially in oncology and immuno-oncology.
- **Develop next-generation immunoproteasome inhibitors.** Over time, we intend to develop new chemistries with differentiated properties, alternate drug delivery methods, such as oral versus subcutaneous, or improved therapeutic windows.
- **Leverage our technical and business expertise to expand our pipeline of small-molecule product candidates.** Our management team, board of directors and clinical and scientific advisors have many years of institutional experience. As such, we intend to leverage the collective talent within our organization and network of advisors to guide our development plans and pipeline expansion, including acquiring or in-licensing small molecule compounds.
- **Maximize the value of our programs by maintaining flexibility to commercialize our product candidates independently or through collaborative partnerships.** We currently have exclusive global development and commercialization rights for our product candidates for all indications that we may pursue. While we may develop these products independently, we may also enter into strategic relationships with biotechnology or pharmaceutical companies to advance our product candidates.

### **Unmet Needs in Autoimmunity and the Opportunity for KZR-616**

Approximately 50 million people in the United States suffer from more than 100 diagnosed autoimmune diseases according to the American Autoimmune Related Diseases Association, Inc. Large indications such as rheumatoid arthritis, inflammatory bowel disease and multiple sclerosis are well known, each afflicting millions of people, while many others are rare or orphan indications with prevalence rates in the United States of under 200,000. Across this spectrum, in indications large and small, there remain significant unmet medical needs and indications with no approved drugs beyond broadly prescribed steroids and similar immunosuppressive regimens.

Prevalence estimates of systemic lupus erythematosus, also known as lupus or SLE, and lupus nephritis in the United States vary, but recent industry estimates suggest over 460,000 and 100,000 patients, respectively. The presence of nephritis dramatically increases mortality risk in lupus patients, and there are currently no FDA-approved therapies for lupus nephritis. Another of our lead indications, idiopathic inflammatory myopathies, is a group of serious disorders involving muscle inflammation and weakness with no FDA-approved therapies. According to the Myositis Association, an estimated 70,000 people in the United States have these disorders.

We track very closely the multiple autoimmune diseases where Velcade® (bortezomib), a nonselective proteasome inhibitor, has demonstrated positive clinical activity, including lupus, lupus nephritis, idiopathic thrombocytopenic purpura, primary Sjögren's syndrome, autoimmune hemolytic anemia and graft-versus-host disease. Although no randomized clinical trials have validated the therapeutic potential of Velcade in autoimmunity, these studies highlight the broad therapeutic potential of proteasome inhibition in general and immunoproteasome inhibition in particular for the treatment of autoimmune diseases.

## [Table of Contents](#)

Following is a partial list of indications where we may pursue development in the future. In all of the indications below, there is evidence supporting immunoproteasome inhibition as a therapeutic modality.

Indication	Positive Animal Data with Kezar Compounds	Positive Clinical Data with Velcade
Lupus nephritis*	✓	✓
Lupus*	✓	✓
Graft-vs-host disease	✓	✓
Idiopathic inflammatory myopathies*		✓
Primary Sjögren's syndrome		✓
Idiopathic thrombocytopenic purpura		✓
Autoimmune hemolytic anemia		✓
Multiple sclerosis	✓	
Type 1 diabetes	✓	
Rheumatoid arthritis	✓	
Crohn's disease	✓	
Myasthenia gravis	✓	

\* We initially intend to develop KZR-616 for these indications.

### **Autoimmune Disease**

Autoimmune disease, or autoimmunity, is an immune response directed against the body's own healthy cells and tissues. Autoimmunity can be caused genetically, by infection or can arise spontaneously, and the prevalence of these diseases is more prominent in females. Autoimmune disease usually involves an autoreactive response by both T-cells and B-cells, also known as lymphocytes, which attack the body's cells and tissues. In a healthy individual, as the immune system develops during childhood, autoreactive lymphocytes are eliminated or suppressed by various mechanisms. When any of these mechanisms fail, autoimmunity can arise. The presence of autoantibodies, a product of self-reactive B-cells, which react with the proteins, DNA, and lipids in healthy cells, is a hallmark of these diseases. Many autoimmune diseases are characterized by disease flares, in which symptoms worsen, followed by a period of remission, in which symptoms improve.

Many autoimmune diseases are not due to the direct effects of autoantibodies but rather due to other mechanisms that cause immune dysfunction. These include activation of inflammatory T-cells and cytotoxic T-cells, which can cause inflammation and tissue damage, the generation of cytokines that are harmful to the surrounding tissue, or activation of macrophages, a kind of immune cell, which can also lead to cytokine release, as well as cellular damage from free radicals. Examples of autoimmune diseases that we initially intend to target include lupus, lupus nephritis and idiopathic inflammatory myopathies.

Lupus is a chronic inflammatory disease that can affect various parts of the body. Most patients present with hematologic, renal or central nervous system manifestations. Significant complications of lupus include damage to joints and kidneys, cardiovascular issues and hematologic abnormalities. Many lupus patients, including those taking immunosuppressive agents and corticosteroids, experience disease flares. Lupus is mild in some people and life threatening in others. Immunologic abnormalities, particularly the production of autoantibodies, are a prominent feature of the disease.

About half of patients with lupus go on to demonstrate symptoms of renal dysfunction called lupus nephritis during the course of their disease. Autoantibodies, including those reacting with components of the cell's nucleus, often



form immune complexes that deposit in the kidney and interfere with its ability to filter urine, decreasing kidney function and increasing protein found in the urine, or proteinuria. Immune complex deposition in the kidney can also activate other arms of the inflammatory response, including the recruitment of proinflammatory immune cells such as macrophages and T-cells, which further exacerbate kidney damage by secreting inflammatory cytokines, including TNF- $\alpha$  and IL-6. Lupus nephritis patients have a significantly increased risk of kidney failure and death relative to lupus patients who do not have lupus nephritis.

Idiopathic inflammatory myopathies are a group of autoimmune diseases in which inflammation occurs in muscles and often in other parts of the body, predominantly the skin. These conditions, which lead to a rash and loss of muscle function, include dermatomyositis, polymyositis, juvenile dermatomyositis, juvenile polymyositis and autoimmune necrotizing myopathy. The cause of idiopathic inflammatory myopathies remains undetermined although most patients present with disease specific autoantibodies.

In most autoimmune diseases, initial therapy consists of long-term treatment with a combination of immunosuppressive agents, such as methotrexate or CellCept® (mycophenolate mofetil), and daily administration of high-dose corticosteroids. This treatment regimen results in high rates of infection, increased risk of malignancy and a wide variety of side effects arising from prolonged steroid use and, in diseases such as lupus nephritis, does not induce high rates of clinically meaningful responses. These treatments can be associated with anemia and other serious side effects. Targeted agents, such as TNF- $\alpha$  antagonists, are used in some autoimmune diseases, such as rheumatoid arthritis, after immunosuppressive agents have failed. Generally, these agents are ineffective in a wide range of autoimmune diseases, including lupus nephritis and idiopathic inflammatory myopathies. However, even if these agents are initially effective, over time patients often experience an inadequate response over time.

### **Protein Degradation and Selective Inhibition of the Immunoproteasome**

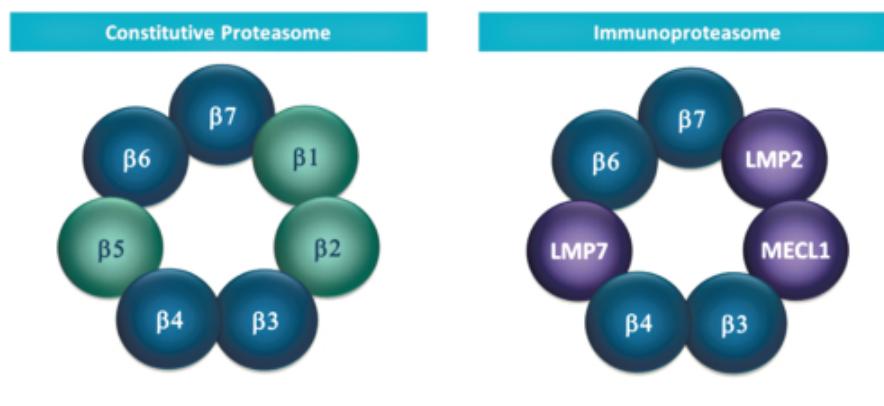
Selective inhibition of the immunoproteasome has the potential to reduce inflammation by targeting dysfunctional immune cells involved in autoimmunity, such as T-cells and B-cells, without causing widespread immunosuppression.

#### ***The Constitutive Proteasome and the Immunoproteasome***

Found in all cells of the body, proteasomes regulate intracellular protein degradation and are essential for many cellular processes such as cell division, cell differentiation and cytokine production. There are two main forms of the proteasome: the constitutive proteasome and the immunoproteasome. In most tissues of the body, the constitutive proteasome is the predominant form. In cells of the immune system, the immunoproteasome is the predominant form.

While both forms of the proteasome mediate protein degradation, the two forms of the proteasome accomplish this utilizing different active sites, which are depicted in the figure below. In the immunoproteasome, three active sites, LMP7, LMP2 and MECL1, replace the constitutive proteasome subunits  $\beta$ 5,  $\beta$ 1 and  $\beta$ 2. These active sites are responsible for cleaving and degrading proteins.

## Depiction of a Portion of the Constitutive Proteasome and the Immunoproteasome



Depiction of the core particle (also known as the 20S particle) of the constitutive proteasome and immunoproteasome. Active sites for protein degradation are highlighted.

### **Safety and Efficacy of Approved Proteasome Inhibitors**

The three proteasome inhibitors approved for the treatment of multiple myeloma, Velcade, Kyprolis and Ninlaro, are potent "dual inhibitors" of both the immunoproteasome and the constitutive proteasome, primarily the LMP7 and  $\beta 5$  subunits, respectively. This dual-targeting profile is necessary to make them effective treatments for multiple myeloma. However, dual proteasome inhibition is associated with hematologic issues such as thrombocytopenia, neutropenia and anemia, as well as constitutional toxicities such as fatigue and myalgia. In addition, Velcade and Ninlaro are associated with risk of peripheral neuropathy, likely due to the off-target activity of these drugs against proteins found in peripheral neurons.

Velcade has demonstrated clinical activity in several autoimmune diseases, including lupus, lupus nephritis, idiopathic thrombocytopenia purpura, autoimmune hemolytic anemia, primary Sjögren's syndrome and graft-versus-host disease. In preclinical models, proteasome inhibition blocked production of most inflammatory cytokines, including many of those targeted by current biologic drugs. However, long-term, chronic administration of Velcade in the setting of autoimmune diseases is not considered feasible due to its side effect profile, in particular hemologic toxicities and risk of peripheral neuropathy. As a result, this promising drug target has remained untapped for use in the treatment autoimmune diseases.

### **KZR-616**

#### **Overview**

We believe we are the only company with a selective immunoproteasome inhibitor that has been nominated as a clinical candidate or is in clinical trials. In addition, we believe that KZR-616, if successfully developed and approved, may have the ability to become the standard of care across a broad range of autoimmune diseases based on the following expected key attributes:

- broad immunomodulatory activity that may allow it to outperform approved therapies and to work in indications where other drugs have failed;
- lack of immunosuppression, a key drawback to other approved therapies in autoimmunity; and
- avoidance of systemic toxicities associated with dual proteasome inhibitors and the peripheral neuropathy associated with Velcade and Ninlaro.

The first selective immunoproteasome inhibitors were discovered by our co-founder and Chief Scientific Officer and his colleagues at Proteolix, Inc., or Proteolix, in 2005. Proteolix was acquired by Onyx in 2009, and Onyx was acquired by Amgen in 2013. In tests of these compounds in multiple *in vitro* and *in vivo* models, it was ascertained that these molecules did not demonstrate cytotoxic activity or potential as anti-cancer agents. However, it was

observed that these inhibitors had profound immunomodulatory effects across myriad immune cell types. In over 15 peer-reviewed publications, our selective inhibitors of the immunoproteasome and related compounds have demonstrated strong therapeutic potential in animal models of multiple autoimmune diseases.

### *Broad Immunomodulatory Activity*

In preclinical models of inflammation, selective inhibitors of the immunoproteasome block cytokine production and result in therapeutic activity equivalent to or better than Velcade or Kyprolis. In mouse models of lupus, our first widely studied selective inhibitor of the immunoproteasome, ONX 0914, showed equivalent efficacy and better tolerability than Velcade. In addition, KZR-616 has been shown to block disease progression and prevent renal damage in animal models of lupus nephritis in a manner that is significantly better than the current standard of care therapy, CellCept. This body of research strongly suggests that the therapeutic benefit of Velcade in patients with autoimmune diseases such as lupus is due to targeting of the immunoproteasome. In one of those peer-reviewed publications, ONX 0914 resulted in a deeper anti-inflammatory response relative to Enbrel® (etanercept), a TNF- $\alpha$  antagonist.

### *Lack of Immunosuppression*

Standard therapies for most autoimmune diseases involve long-term use of immunosuppressive agents and daily administration of high-doses of corticosteroids, resulting in high rates of infection, increased risk of malignancy and other side effects. In the setting of multiple myeloma, the dual proteasome inhibitors Velcade and Kyprolis are not associated with a high risk of immunosuppression. In animal models, selective immunoproteasome inhibitors showed a lack of immunosuppression, and KZR-616 was shown to mediate an anti-inflammatory response in models of autoimmunity without the addition of steroids.

Targeted agents, such as TNF- $\alpha$  antagonists, lack sufficient therapeutic activity in diseases such as lupus and lupus nephritis due in part to broad immune dysfunction in these diseases. Selective immunoproteasome inhibitors, including KZR-616, have shown direct immunomodulatory activity against the vast majority of cytokines and activated immune cells known as effector cells involved in autoimmune diseases. Therefore, we believe KZR-616 represents a novel therapy with the potential to reduce steroid burden and to provide clinical benefit in patients with autoimmune diseases that cannot be treated by current targeted agents.

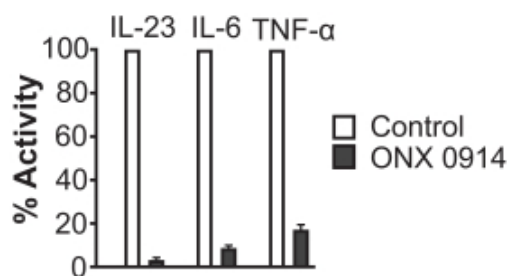
### *Avoids Systemic Toxicity or Neurotoxicity*

In animal models of toxicology, KZR-616 was able to induce potent inhibition of the immunoproteasome without inducing systemic toxicities seen in animals treated with Kyprolis and Velcade. Specifically, KZR-616 did not induce hematologic abnormalities or indications of cardiovascular, hepatic or renal toxicity in animals, findings that were commonly noted in animals receiving the dual-proteasome inhibitors. In addition, KZR-616, a peptide epoxyketone-based inhibitor of the immunoproteasome, has shown no off-target effects or signs of neurotoxicity in preclinical studies. This is in contrast to Velcade and Ninlaro, which are boronic acid-based proteasome inhibitors that induce potent inhibition of several off-targets, including an enzyme required for the normal function of neurons.

### *Preclinical Data with Kezar Compounds and Clinical Data with Velcade Support KZR-616 Development*

Most autoimmune diseases arise in part due to overexpression of secreted proteins called cytokines. Several of these cytokines, such as TNF- $\alpha$ , have been successfully targeted with biologic agents. When applied to human immune cells such as monocytes, selective immunoproteasome inhibitors, like KZR-616 and ONX 0914, blocked the release of inflammatory cytokines following cell stimulation. The cytokines whose secretion is inhibited include IL-23, IL-6, and TNF- $\alpha$ , which are variously targeted by approved monoclonal antibody therapeutics such as Actemra® (tocilizumab), Enbrel, Humira® (adalimumab) and Stelara® (ustekinumab).

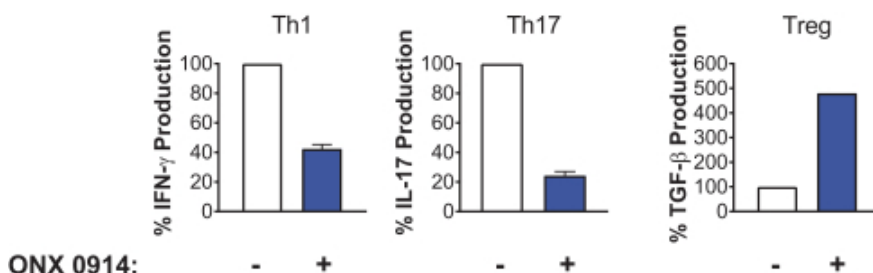
### Administration of ONX 0914 Blocked the Release of Cytokines



Human peripheral blood mononuclear cells, which are white blood cells, from healthy donors were stimulated to produce cytokines with the agent lipopolysaccharide.

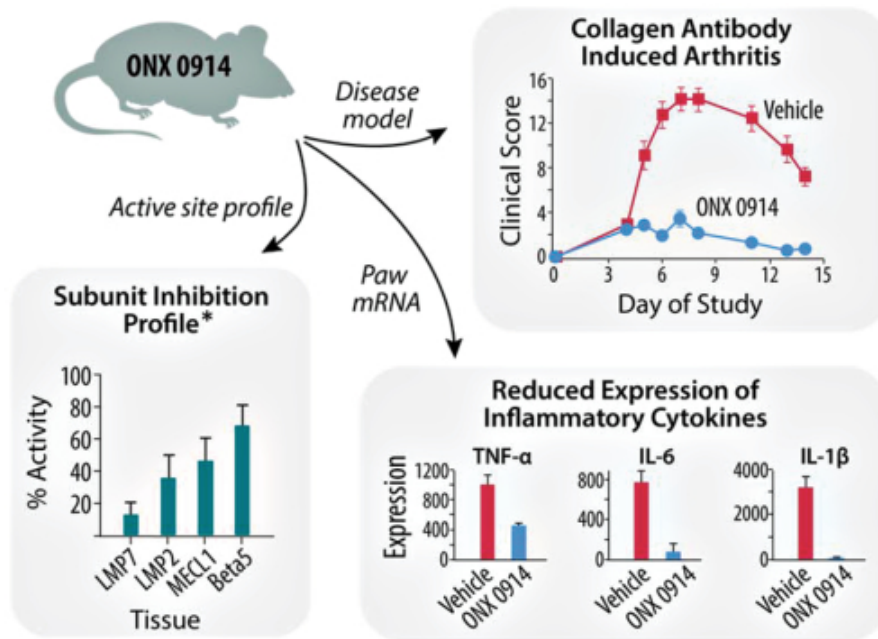
Activated T-cells can induce inflammation when they differentiate into immune effector cells, such as Th1 and Th17, and express cytokines, such as IFN-γ and IL-17. Cosentyx® (secukinumab), which targets IL-17, is approved for certain autoimmune diseases. Inhibition of the immunoproteasome in activated T-cells causes a reduction in Th1 and Th17 activity. Conversely, several autoimmune diseases are thought to be mediated in part by a reduction in the number of regulatory T-cells, or Tregs, which can reduce inflammation in part via secretion of the cytokine TGF-β. Inhibition of the immunoproteasome increases the activity of Treg cells in part via increased TGF-β production. The graph below shows the results from an experiment measuring the effect of immunoproteasome inhibition on human Th1, Th17 and Treg cells following a one hour exposure to ONX 0914 followed by restimulation to measure cytokine release.

### Immunoproteasome Inhibitor ONX 0914 Blocked Th1 and Th17 Inflammatory Cells and Increased Regulatory T-Cell Activity



KZR-616 and ONX 0914 have been observed to be therapeutically active in multiple animal models of autoimmunity, including lupus, lupus nephritis, rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis and Type 1 diabetes. As shown in the figure below, in a mouse model of rheumatoid arthritis, administration of a single dose of ONX 0914, which induced potent and selective inhibition of the immunoproteasome, was sufficient to induce complete disease remission and inhibit the expression of several inflammatory cytokines in the animals. Inhibition of all three immunoproteasome active sites (LMP7, LMP2 and MECL1) was induced by ONX 0914 with minimal impact on the b5 subunit of the constitutive proteasome. The mice were followed for 14 days for signs of inflammation in their joints, and expression of three inflammatory cytokines was measured on Day 7 of the study. In a peer-reviewed publication, ONX 0914 resulted in a deeper anti-inflammatory response relative to Enbrel.

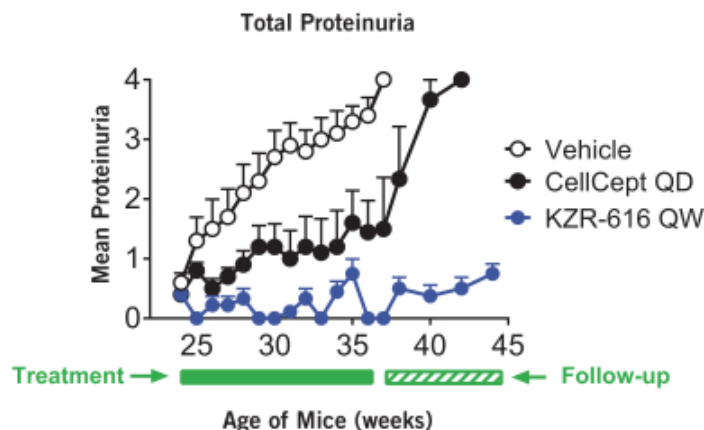
**A Single Dose of ONX 0914 Selectively Inhibited Immunoproteasome Active Sites and Reduced Inflammation and Cytokine Expression in a Rheumatoid Arthritis Model**



\*same assay as used in Phase 1a clinical trial of KZR-616

In a mouse model of lupus nephritis, KZR-616 was compared to the standard of care, CellCept, for 12 weeks of therapy and 8 weeks of follow-up after the last dose. Compared to CellCept, KZR-616 induced a greater improvement in renal response as measured by reduced proteinuria. CellCept was active in this model, but, notably, renal disease progressed as soon as treatment stopped. In the mice treated with once weekly administration of KZR-616, a prolonged prevention of renal disease was noted out to eight weeks after the last dose, suggesting long-lasting immunomodulation. The effects of KZR-616 were not limited to a reduction in proteinuria; KZR-616 therapy also reduced kidney damage, decreased the number of activated B-cells and autoantibody producing B-cells and reduced levels of autoantibodies.

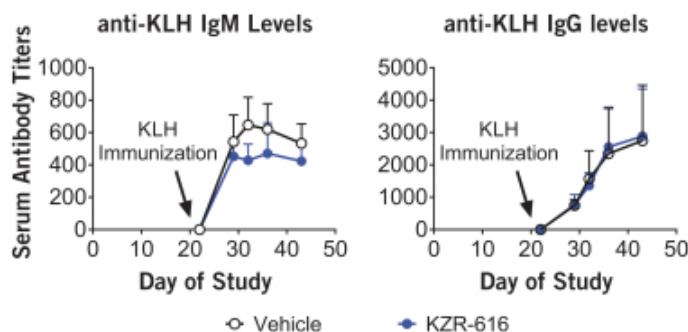
### KZR-616 Successfully Treated Renal Disease in a Lupus Nephritis Mouse Model and Outperformed a Standard of Care Therapy



In mice with active lupus nephritis, KZR-616 or CellCept was given to animals for 12 weeks. QD means once per day and QW means once per week. Proteinuria was measured weekly or biweekly for 20 weeks.

Immunosuppression, the inability of the body's immune system to generate antibodies to vaccines or to fight off infection, is a common side effect of many drugs approved for or in development in autoimmunity. To assess the risk of immunosuppression due to treatment with our selective immunoproteasome inhibitors, our scientists and their academic collaborators performed several studies in animal models. Mice receiving daily administration of ONX 0914 experienced no loss in the ability to fight off viral infections. Nonhuman primates receiving weekly doses of KZR-616 raised normal antibody levels following immunization with the antigen KLH.

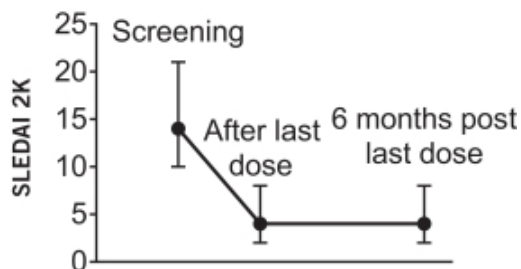
#### Nonhuman Primates Receiving KZR-616 Demonstrated Normal Antibody Responses



Nonhuman primates were given KZR-616 once per week and were immunized on Day 21 with KLH. Levels of antibodies raised against KLH were measured out to 21 days after immunization.

In parallel to the development of immunoproteasome inhibitors at Proteolix and Onyx, independent clinical researchers were exploring the application of the dual proteasome inhibitor Velcade in patients with persistent and treatment refractory autoimmune diseases. In one investigation, Velcade was administered for up to three months in patients with lupus who had previously been treated with standard of care but were still experiencing severe symptoms. Clinical responses were seen in all patients and improvements in disease symptoms were seen as early as 21 days from the start of treatment. In the subset of lupus patients with lupus nephritis, Velcade induced meaningful reduction in proteinuria with a median decrease of over 60% during the treatment period.

### Velcade Reduced Lupus Disease Severity

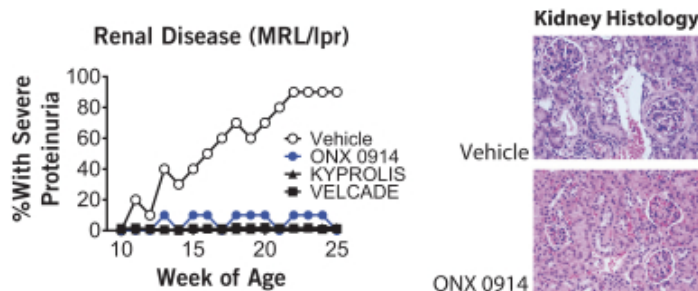


16 lupus patients were treated with Velcade for up to 4 treatment cycles. Disease severity as measured by the systemic lupus erythematosus disease activity index, or SLEDAI 2K scale, was monitored prior to the first dose of Velcade, after the last dose of Velcade and 6 months after the last dose of Velcade. Median data from all patients are shown. Adapted from Alexander et al. 2015

Despite this clinical activity in lupus, Velcade is not suitable for long-term administration in any chronic inflammatory or autoimmune disease. This is due to Velcade's associated hematologic adverse events such as thrombocytopenia, anemia and neutropenia and induces peripheral neuropathy that can become permanent if dosing is continued for an extended period of time.

As shown in the figure below, our selective immunoproteasome inhibitor ONX 0914 was compared to dual targeting proteasome inhibitors Velcade and Kyprolis in mouse models of lupus. ONX 0914 was found to replicate the therapeutic activity of the dual proteasome inhibitors in these models, which strongly suggests that the clinical activity of Velcade and Kyprolis in patients with lupus is due to immunoproteasome inhibition. In fact, selective immunoproteasome inhibition resulted in equivalent efficacy and better tolerability in animal models to that of dual proteasome inhibitors. Also, selective immunoproteasome inhibition induced similar reductions in autoantibodies, cytokine reduction and autoimmune cell reduction to those demonstrated by dual-proteasome inhibitors.

### Immunoproteasome Inhibition Was as Effective as Velcade and Kyprolis in Mouse Models of Lupus and Lupus Nephritis



In mice with active nephritis, ONX 0914, Velcade or Kyprolis was given to animals for 12 weeks. Renal disease was measured by monitoring proteinuria and at the end of study kidneys were analyzed by histology for disease-related changes.

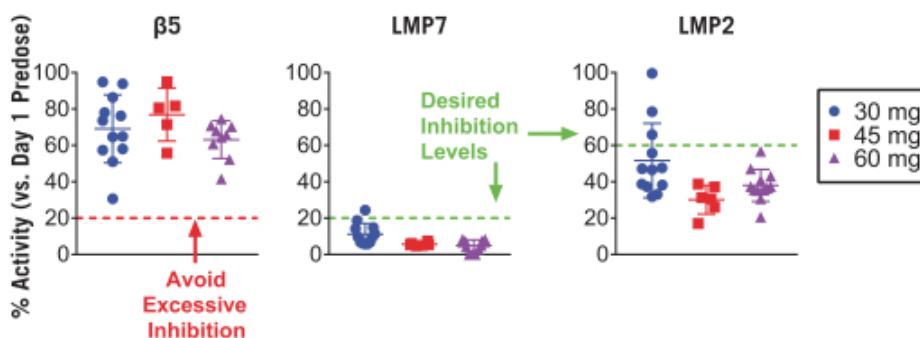
### Our Phase 1a Clinical Data with KZR-616

In 2017, we completed a Phase 1a clinical trial in Australia to assess the safety, tolerability, PK, PD and immunomodulatory activity of KZR-616 in 82 healthy volunteers. In this trial, KZR-616 or a placebo was administered as a single dose or repeat-weekly subcutaneous administration over four weeks. Results from the trial, including the data and figures below, were presented at the 2017 American College of Rheumatology Annual Meeting.

Administration of KZR-616 to healthy volunteers resulted in a dose-dependent increase in exposure and inhibition of immunoproteasome activity. Selective inhibition of the immunoproteasome over the constitutive proteasome was demonstrated using multiple PD assays. Cytokine levels in ex vivo stimulation assays demonstrated an anti-cytokine effect of KZR-616 treatment consistent with preclinical models. Single and weekly administration at a dose that resulted in potent inhibition of the immunoproteasome were well tolerated and did not result in any of the hematologic adverse events that are often seen with Velcade and Kyprolis. In addition, there were no changes in liver or kidney function, ECG abnormalities, prolonged constitutional adverse events, or signs of immunosuppression with weekly administration of KZR-616.

In our Phase 1a healthy volunteer study, we observed that PK and PD were consistent across subjects and with repeat dosing. The graphs below show the proteasome subunit inhibition profiles in healthy volunteers receiving a single dose of either 30, 45, or 60 mg of KZR-616. At a 30 mg dose, 75% of the subjects (9 of 12) achieved the desired inhibition of the immunoproteasome subunits LMP7 and LMP2 and all subjects avoided 80% inhibition of the  $\beta$ 5 subunit of the constitutive proteasome. In contrast, Kyprolis induces greater than 80% inhibition of both LMP7 and  $\beta$ 5 at its labeled dose. All subjects receiving a dose of 45 or 60 mg achieved the desired inhibition of both LMP7 and LMP2 and also avoided excessive inhibition of the  $\beta$ 5 subunit.

**KZR-616 Inhibited Both LMP7 and LMP2 While Avoiding Excessive Inhibition of  $\beta$ 5, thereby Demonstrating Selective Immunoproteasome Inhibition**

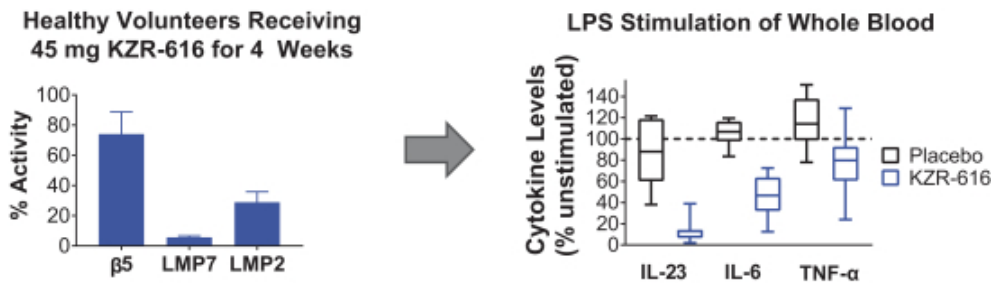


In Phase 1a subjects receiving subcutaneous administration of KZR-616, the most common adverse events, or AEs, were injection site reactions that were generally mild and transient and did not appear to increase in severity or frequency with repeat dosing. In addition, at the 60 mg dose level, two separate cohorts of six subjects each received a single dose of KZR-616. In the second cohort, 4 of 6 subjects receiving drug experienced AEs termed “systemic drug reactions,” namely hypotension, sinus tachycardia, nausea, vomiting and rigors and chills. Two of these subjects’ reactions were classified as Grade 2 and were recorded as serious adverse events, or SAEs. These systemic drug reactions appear similar to reactions commonly reported upon initial administration of some monoclonal antibody therapies including Rituxan® (rituximab) and Remicade® (infliximab). These findings were not seen with repeat dosing at 45 mg, and we conducted no repeat dosing at the 60 mg dose level.

In order to determine whether KZR-616 was having a biologic effect in healthy volunteers, blood samples were taken before and after dosing and stimulated ex vivo to induce release of cytokines from white blood cells in the blood samples. We observed that after repeat dose administration of KZR-616 at a dose of 45 mg, there was significantly reduced release of cytokines compared to subjects receiving placebo. The following figure shows the profile of proteasome subunit inhibition in the healthy volunteers receiving 45 mg of KZR-616 and the resulting reduction in cytokine release following stimulation with lipopolysaccharide, or LPS.

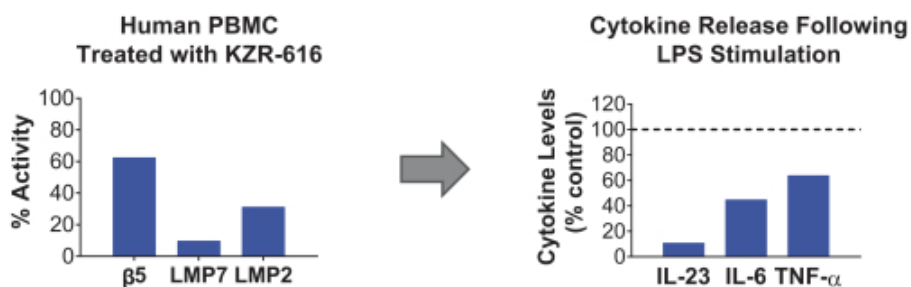


**Profile of Proteasome Subunit Inhibition in Healthy Volunteers Receiving KZR-616 and the Resulting Inhibition of Cytokine Release Following Stimulation**



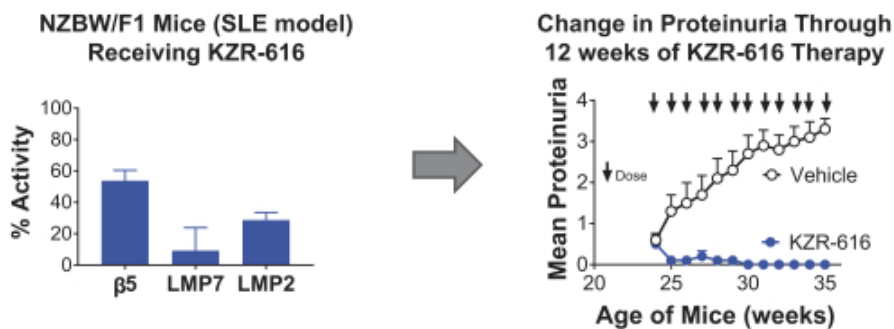
This profile of proteasome subunit inhibition is very similar to that observed when we treat white blood cells in vitro and stimulate them to release the same cytokines. As seen in the figure below, we demonstrated in vitro with human peripheral blood mononuclear cells, or PBMC, that a similar immunoproteasome subunit inhibition profile resulted in a comparable biologic response, namely inhibition of cytokine release.

**Profile of Proteasome Subunit Inhibition in PBMC Exposed In Vitro to KZR-616 and the Resulting Inhibition of Cytokine Release Following Stimulation**



Similarly, we have also shown that a dose of KZR-616 in mice can induce a similar immunoproteasome inhibition profile to that seen in human cells treated in vitro and in healthy volunteers receiving a dose of 45 mg. When KZR-616 was administered weekly for 12 weeks in a mouse model of lupus, mice saw a complete resolution of their nephritis, as measured by the absence of proteinuria.

**Profile of Proteasome Subunit Inhibition in Mice Receiving KZR-616 and the Resulting Remission of Proteinuria in a Mouse Model of Lupus Nephritis**



These data sets demonstrate a consistency of immunoproteasome inhibition profiles and anti-inflammatory activity across both preclinical and clinical settings. We believe these data, together with our other preclinical data

## [Table of Contents](#)

demonstrating inhibition of multiple inflammatory cytokines and efficacy in animal models of autoimmune diseases, demonstrate the potential for KZR-616 to be a promising new agent for the treatment of several autoimmune disorders.

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

Following the completion of our Phase 1a clinical trial in healthy volunteers, we filed an investigational new drug application, or IND, with the Division of Pulmonary and Rheumatology Products at the FDA.

The IND is currently open with the FDA, and in March 2018, we began enrollment of patients in KZR-616-002, a multi-center Phase 1b/2 clinical trial in patients with lupus and lupus nephritis. The Phase 1b portion includes open-label dose escalation in patients with active lupus (with and without lupus nephritis) who have failed to respond to at least one standard therapeutic regimen, such as Plaquenil® (hydroxychloroquine) or Benlysta® (belimumab) or an immunosuppressive agent such as CellCept. All patients must have a SLEDAI score of 4 or higher and must have measurable levels of autoantibodies. In this portion of the trial, we plan to enroll up to four cohorts of four to six patients each at dose levels of 45, 60, 75 and 90 mg. Each patient will receive up to 13 weekly subcutaneous administrations of KZR-616, and new cohorts will initiate enrollment after the previous cohort clears a four-week safety review. As of May 22, 2018, we have three patients currently enrolled in the 45 mg cohort, all of whom have been on study for greater than one month. The primary endpoints of both portions of the trial are safety and tolerability. Secondary and exploratory endpoints include PK, PD and biomarker assessments and measures of efficacy. We intend to use the data generated from the Phase 1b portion to select the doses for the Phase 2 portion of the trial. Initial top-line results from the Phase 1b portion of the trial are expected in the first half of 2019.

The Phase 1b portion of KZR-616-002 allows for two additional expansion cohorts in which we may evaluate KZR-616 in different subsets of patients or with different dosing regimens. If we choose to pursue these cohorts, we expect to initiate enrollment of these cohorts in 2019.

Once the dose levels of 45 and 60 mg have cleared safety review in the Phase 1b portion of the trial, we intend to commence the Phase 2 portion in the first half of 2019. The Phase 2 portion is a randomized placebo-controlled, double-blind trial to evaluate the safety and efficacy of KZR-616 in patients with active proliferative lupus nephritis. Inclusion criteria include patients with active proliferative lupus nephritis (Class III or IV  $\pm$  V) who are undergoing induction therapy with CellCept and prednisone and have been treated for one to three months with this regimen. There will be three cohorts assigned to this trial, KZR-616 at 45 mg, KZR-616 at 60 mg and placebo. All patients will remain on their CellCept and prednisone induction therapy during the 13-week treatment period.

We plan to initiate up to four additional Phase 1b or Phase 2 clinical trials in 2019 to assess the safety, pharmacology and clinical activity of KZR-616 in autoimmune diseases. The first of these will likely be a randomized Phase 2 clinical trial in patients with idiopathic inflammatory myopathies. We expect to select additional indications based on assessment of clinical and regulatory feasibility and scientific evidence demonstrating a potential therapeutic benefit for KZR-616. We expect these indications to be autoimmune diseases that are orphan indications or other areas of high unmet medical need.

If our early trials demonstrate meaningful clinical activity, we intend to apply for various regulatory designations, possibly including Breakthrough Therapy designation, Fast Track designation or orphan drug designation. Receiving any of these designations could result in priority review from the FDA upon submission of a marketing application. In addition, some orphan indications we are considering may require smaller safety databases and therefore smaller numbers of patients for approval. Finally, by targeting indications with high unmet medical need, KZR-616 may face less competition and, if approved, enjoy a better chance of rapid uptake by physicians and patients eager to find effective treatments.

### **Protein Secretion and the Sec61 Translocon**

We are conducting research and discovery efforts targeting protein secretion pathways as potential therapies for oncology and immuno-oncology. In mammalian cells, the secretion of proteins such as cytokines and the expression of cell surface transmembrane proteins such as cytokine receptors involve a process called cotranslational translocation. This process entails the insertion of nascent polypeptides, which are proteins, into the endoplasmic reticulum, or ER, of the cell. For most proteins, this insertion into the ER occurs via the Sec61 translocon, a highly conserved multi-subunit protein complex found in the membrane of the ER of all cells. Inhibition of the Sec61

## [Table of Contents](#)

translocon with small molecules blocks the secretion of some or all proteins, which can result in several physiologic outcomes, including altered cellular function, inhibition of cytokine release and/or cell death.

We are currently conducting multiple drug discovery campaigns within our protein secretion research program. Our two main approaches are to discover and develop small molecule therapeutics that target the interaction of the unique signal sequences of newly created proteins with the Sec61 translocon, which we refer to as specific protein secretion inhibitors or SPSIs, and to block protein secretion broadly with agents, referred to as cotransins. Some of our drug discovery campaigns within our protein secretion research program have reached the stage of animal testing, including animal models of cancer, with promising initial results. Our scientists and co-founder Dr. Jack Taunton of UCSF, have developed a significant level of proprietary knowledge around Sec61 translocon biology, the pharmacology and toxicology of protein secretion inhibitors, and know-how for determination of optimal properties for drug candidates.

### **License Agreement with Onyx**

In June 2015, in connection with an issuance of 1,121,384 shares of our Series A convertible preferred stock to Onyx, we entered into a license agreement with Onyx, or the Onyx license agreement. Pursuant to the Onyx license agreement, Onyx granted us an exclusive license under certain patent rights, and a non-exclusive license to certain know-how, in each case controlled by Onyx and relating to our immunoproteasome program, to develop, manufacture or commercialize any pharmaceutical product containing certain types of compounds that are selective for the immunoproteasome for any and all uses other than those related to the diagnosis and/or treatment in humans of cancerous or pre-cancerous diseases and/or conditions, including those related to hematological diseases and/or conditions that are not inflammatory diseases or disorders.

Under the Onyx license agreement, we are obligated to pay Onyx milestone payments of up to \$172.5 million in the aggregate upon the achievement of certain development, regulatory and sales milestones. Commencing upon the first commercial sale of a licensed product, we must make royalty payments to Onyx on net sales of such licensed products based on tiered annual net sales thresholds at varying royalty rates ranging in the mid to high single digits, subject to certain customary reductions. We must pay such royalties on a product-by-product and country-by-country basis until the latest to occur of the expiration of all licensed patents that claim such product in such country, the loss of regulatory exclusivity for such product in such country and the tenth anniversary of the first commercial sale of such product in such country. The licensed product patent portfolio includes issued patents in the United States, Australia, Canada, China, Europe, Japan, Mexico, Singapore and South Korea with expiration dates ranging from 2027 to 2034, absent any patent extensions available. For more information on our intellectual property, see "Business — Intellectual Property." Upon the expiration of such royalty term in such country, our license to such product will become fully paid-up, irrevocable, and non-exclusive.

Under the Onyx license agreement, Onyx has a right of first negotiation to obtain a license, or a similar transfer of rights, to develop and/or commercialize any licensed product.

The Onyx license agreement will remain in effect until the expiration of last-to-expire royalty term for any licensed product in the territory. The license agreement may be terminated by us with prior notice, by either party in the event of a material breach by the other party that remains uncured for a certain number of days, such number depending on the type of breach, by either party for insolvency of the other party, or immediately by Onyx if we challenge any of the licensed patents.

### **Sales and Marketing**

Given our stage of development, we have not yet established a commercial organization or distribution capabilities. We intend to build a commercial infrastructure to support sales of KZR-616 in the United States. We expect to manage sales, marketing and distribution through internal resources and third-party relationships. While we may commit significant financial and management resources to commercial activities, we will also consider collaborating with one or more pharmaceutical companies to enhance our commercial capabilities. Outside the United States, we plan to seek pharmaceutical partners for sales and marketing activities.

## **Manufacturing**

Our internal manufacturing capabilities include production of small-scale quantities of active pharmaceutical ingredient, or API, for characterization and preclinical assessment of product candidates. We do not own or operate manufacturing facilities compliant with current good manufacturing practices, or cGMP, and we do not have plans to develop our own cGMP manufacturing operations in the foreseeable future.

We currently rely on third-party contract manufacturing organizations, or CMOs, for all of our required raw materials, API and finished product for our clinical trials and for most of our preclinical research. We also contract with additional third parties for the filling, labeling, packaging, storage and distribution of investigational drug products. We maintain agreements with our CMOs that include confidentiality and intellectual property provisions to protect our proprietary rights related to KZR-616. We obtain our supplies from these CMOs on a purchase order basis, and do not have long term supply agreements in place. We do not have arrangements in place for redundant supply; however, we believe we can identify and establish additional CMOs to provide API and finished drug product without significant disruption to our business or clinical development timelines.

Development and commercial quantities of any products that we develop will need to be manufactured in facilities, and by processes, that comply with the requirements of the FDA and the regulatory agencies of other jurisdictions in which we are seeking approval. If KZR-616 is approved by any regulatory agency, we intend to enter into agreements with a third-party contract manufacturer and one or more backup manufacturers for the commercial production of KZR-616.

Starting with the Phase 2 trial, KZR-616 will be a lyophilized product candidate, meaning it is freeze-dried and must be reconstituted with water prior to delivery to a patient. While lyophilized products are common in the drug industry, we intend that if approved and commercialized, KZR-616 will be self-administered by patients via a dual-chamber system. There are several technical challenges we will need to solve related to the use of a self-administered dual-chamber system, including whether KZR-616 is amenable to use in such a device and is sufficiently stable to meet regulatory requirements. In addition, we will need to enter into an additional agreement with a CMO to manufacture the self-administered dual-chamber system. We are aware of only one company that manufactures a self-administered dual-chamber system that has received FDA approval.

## **Competition**

Drug development is highly competitive and subject to rapid and significant technological advancements. Our ability to compete will significantly depend upon our ability to complete necessary clinical trials and regulatory approval processes, and effectively market any drug that we may successfully develop. Our current and potential future competitors include pharmaceutical and biotechnology companies, academic institutions and government agencies. The primary competitive factors that will affect the commercial success of any product candidate for which we may receive marketing approval include efficacy, safety, tolerability, dosing convenience, price, coverage and reimbursement. Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, as well as in obtaining regulatory approvals of those product candidates in the United States and in foreign countries.

Our current and potential future competitors may also have significantly more experience commercializing drugs that have been approved for marketing. Mergers and acquisitions in the pharmaceutical and biotechnology industries could result in even more resources being concentrated among a small number of our competitors.

Accordingly, our competitors may be more successful than us in obtaining regulatory approval for therapies and in achieving widespread market acceptance of their drugs. It is also possible that the development of a cure or more effective treatment method for the disorders we are targeting by a competitor could render our current or future product candidates non-competitive or obsolete or reduce the demand for our product candidates before we can recover our development and commercialization expenses.

Currently, lupus is treated with corticosteroids and immunosuppressive agents such as hydroxychloroquine. Current guidance for the treatment of proliferative lupus nephritis involves induction therapy with either CellCept or Cytoxan®

(cyclophosphamide) and corticosteroids. In addition, Benlysta, an anti-BAFF monoclonal antibody from GlaxoSmithKline is approved by the FDA for the treatment of moderate to severe lupus but not lupus nephritis.

Other companies are developing agents to treat both lupus and lupus nephritis. In lupus, these agents include antibodies against the interferon alpha receptor, such as anifrolumab from AstraZeneca, and against IL-23/IL-12, such as Stelara from Janssen Biotech, Inc., and small molecule agents targeting JAK, such as baricitinib from Eli Lilly and Co., cereblon from Celgene, and BTK, such as investigational drug evobrutinib, under evaluation by Merck KgaA.

In proliferative lupus nephritis, other companies are developing novel agents to add to the standard induction regimens and include Benlysta, anifrolumab and the investigational immunosuppressive agent voclosporin from Aurinia Pharmaceuticals, Inc.

## **Intellectual Property**

Our intellectual property is critical to our business and we strive to protect it, including by obtaining and maintaining patent protection in the United States and internationally for our technology platform, product candidates, novel biological discoveries, new therapeutic approaches and potential indications, and other inventions that are important to our business. Our policy is to seek to protect our proprietary and intellectual property position by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors. To help protect our proprietary know-how that is not patentable, we rely on confidentiality agreements to protect our interests. We require our employees, consultants and advisors to enter into confidentiality agreements prohibiting the disclosure of confidential information and requiring disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

For our product candidates, generally we initially pursue patent protection covering compositions of matter and methods of use. Throughout the development of our product candidates, we seek to identify additional means of obtaining patent protection that would potentially enhance commercial success, including through additional methods of use, process of making, and salt and polymorph related claims.

In total, our patent portfolio, including patents licensed from Onyx, comprises eight different patent families, filed in various jurisdictions worldwide, including families directed to composition of matter for selective immunoproteasome inhibitors and protein secretion inhibitors. At least two additional patent filings for new composition of matter subject matter are planned for the first half of 2018. Our patent portfolio includes issued patents in the United States, Australia, Canada, China, Europe, Japan, Mexico, Singapore and South Korea with expiration dates ranging from 2027 to 2034. Our patent portfolio is outlined below:

### ***Selective Immunoproteasome Inhibitors***

PRTX-019—Initial composition of matter patent covering selective immunoproteasome inhibitors, which also covers ONX 0914, our tool compound found in multiple publications. We have issued patents in the United States, Australia, Canada, China, Europe, Japan, Mexico, Singapore and South Korea. The 20-year term of this family is June 2027, absent any patent term extensions available.

PRTX-039—composition of matter patent covering selective immunoproteasome inhibitors, including selective LMP7 inhibitors and dual LMP7/LMP2 inhibitors. We have issued patents in the United States and Europe. This patent covers KZR-616 and its closely related analogs. The 20-year term of this family is March 2034, absent any patent term extensions available.

PRTX-041—composition of matter patent covering selective immunoproteasome inhibitors of the LMP2 subunit. We have issued patents in the United States and Singapore. The 20-year term of this family is March 2034, absent any patent term extensions available.

Patent applications describing salt and crystal forms of KZR-616 and process chemistry for large scale manufacturing have also been filed. No patents have been issued yet, but the 20-year term of each of these families is expected to be June 2037, absent any patent term extensions available.

## [Table of Contents](#)

Additional therapeutic methods applications were filed in 2017 covering the combination of selective LMP7 and LMP2 inhibitors, that is, the combination of PRTX-039 + PRTX-041 inhibitors, for the treatment of autoimmune diseases and the combination of KZR-616 and related analogs and immunomodulator drugs, such as mycophenylate mofetil for the treatment of lupus, lupus nephritis and other autoimmune diseases. We expect the non-provisional applications for each of these families will be filed in August or September 2018. No patents have been issued yet, but the 20-year term of these families is expected to be August or September 2038, absent any patent term extensions available.

We expect to file future applications for new composition of matter for second generation selective inhibitors of the immunoproteasome pending results from ongoing drug discovery efforts.

### ***Protein Secretion Modulators***

Our scientists and the laboratory of our co-founder Dr. Jack Taunton of UCSF, have developed a significant level of proprietary knowledge around Sec61 translocon biology, the pharmacology and toxicology of protein secretion inhibitors, and know-how for determination of optimal properties for product candidates. We have filed and expect to continue to file patent applications around protein secretion inhibitors directed to different scaffolds currently being pursued by us alone or in collaboration with the Taunton Lab at UCSF.

### ***Patent Term and Term Extensions***

Individual patents have terms for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, utility patents issued for applications filed in the United States are granted a term of 20 years from the earliest effective filing date of a non-provisional patent application. In addition, in certain instances, a patent term can be extended to recapture a portion of the U.S. Patent and Trademark Office, or the USPTO, delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory review period. However, as to the FDA component, the restoration period cannot be longer than five years and the restoration period cannot extend the patent term beyond 14 years from FDA approval. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is also 20 years from the earliest effective filing date. All taxes or annuities for a patent, as required by the USPTO and various foreign jurisdictions, must be timely paid in order for the patent to remain in force during this period of time.

The actual protection afforded by a patent may vary on a product by product basis, from country to country, and can depend 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.

Our patents and patent applications are subject to procedural or legal challenges by others. We may be unable to obtain, maintain and protect the intellectual property rights necessary to conduct our business, and we may be subject to claims that we infringe or otherwise violate the intellectual property rights of others, which could materially harm our business. For more information, see the section titled "Risk Factors—Risks Related to Our Intellectual Property."

### ***Trademarks and Know-How***

In connection with the ongoing development and advancement of our products and services in the United States and various international jurisdictions, we seek to create protection for our marks and enhance their value by pursuing trademarks and service marks where available and when appropriate. In addition to patent and trademark protection, we rely upon know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees and consultants, and invention assignment agreements with our employees and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our commercial partners, collaborators, employees, and consultants 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.

## **Government Regulation and Product Approval**

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

KZR-616 is designed to be delivered to patients via a self-administered dual-chamber system. In the United States, products composed of components that would normally be regulated by different centers at the FDA are known as combination products. While we expect that KZR-616 will be regulated as a drug and its delivery device will be evaluated with it as a single product, we cannot be certain that the FDA would not require independent clearance or approval for the self-administered dual-chamber system delivery. Whether approved separately or under a single New Drug Application, or NDA, our self-administered dual-chamber system will have to meet medical device regulatory requirements, including design verification and validation and human factors testing.

### ***United States Government Regulation***

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the drug development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the FDA before a drug may be marketed in the United States generally involves:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled clinical trials, in accordance with good clinical practice, or GCP, requirements to establish the safety and efficacy of the proposed drug for each indication;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with cGMP requirements, and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- satisfactory completion of an FDA inspection of selected clinical sites to assure compliance with GCPs and the integrity of the clinical data;
- payment of user fees; and
- FDA review and approval of the NDA.

### ***Preclinical Studies***

Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as animal studies to assess potential safety and efficacy. An IND sponsor must submit the results of the nonclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, among other things, to the FDA as part of an IND. Some nonclinical testing may continue even 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 clinical trial on a clinical hold.



## [Table of Contents](#)

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*

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, an IRB at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must continue to oversee the clinical trial while it is being conducted. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their [ClinicalTrials.gov](#) website.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined. In Phase 1, the drug is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an initial indication of its effectiveness. In Phase 2, the drug typically is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage. In Phase 3, the drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the safety and efficacy of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.

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

### *Marketing Approval*

Assuming successful completion of the required clinical testing, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. In most cases, the submission of an NDA is subject to a substantial application user fee. Under the Prescription Drug User Fee Act, or PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the date of "filing" of a standard NDA for a new molecular entity to review and act on the submission. This review typically takes twelve months from the date the NDA is submitted to the FDA because the FDA has approximately two months to make a "filing" decision.

In addition, under the Pediatric Research Equity Act, certain NDAs or supplements to an NDA must contain data that are adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

The FDA also may require submission of a risk evaluation and mitigation strategy, or REMS, plan to ensure that the benefits of the drug outweigh its risks. The REMS plan could include medication guides, physician communication plans, assessment plans, and/or elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools.



## [Table of Contents](#)

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA reviews an NDA to determine, among other things, whether the drug is safe and effective and whether the facility in which it is manufactured, processed, packaged or held meets standards designed to assure the product's continued safety, quality and purity.

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

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical trial sites to assure compliance with GCP requirements.

The testing and approval process for an NDA requires substantial time, effort and financial resources, and takes several years to complete. Data obtained from preclinical and clinical testing are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. The FDA may not grant approval of an NDA on a timely basis, or at all.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a complete response letter. A complete response letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing in order for FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Even if the FDA approves a product, it may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution and use restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes, and additional labeling claims, are subject to further testing requirements and FDA review and approval.

### *Orphan Drug Designation*

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000, there is no reasonable expectation that sales of the drug in the United States will be sufficient to offset the costs of developing and making the drug available in the United States. Orphan drug designation must be requested before submitting an NDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If the FDA approves a sponsor's marketing application for a designated orphan drug for use in the rare disease or condition for which it was designated, the sponsor is eligible for a seven-year period of marketing exclusivity, during

which the FDA may not approve another sponsor's marketing application for a drug with the same active moiety and intended for the same use or indication as the approved orphan drug, except in limited circumstances, such as if a subsequent sponsor demonstrates its product is clinically superior. During a sponsor's orphan drug exclusivity period, competitors, however, may receive approval for drugs with different active moieties for the same indication as the approved orphan drug, or for drugs with the same active moiety as the approved orphan drug, but for different indications. Orphan drug exclusivity could block the approval of one of our products for seven years if a competitor obtains approval for a drug with the same active moiety intended for the same indication before we do, unless we are able to demonstrate that grounds for withdrawal of the orphan drug exclusivity exist, or that our product is clinically superior. Further, if a designated orphan drug receives marketing approval for an indication broader than the rare disease or condition for which it received orphan drug designation, it may not be entitled to exclusivity.

*Special FDA Expedited Review and Approval Programs*

The FDA has various programs, including fast track designation, accelerated approval, priority review, and breakthrough therapy designation, which are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

To be eligible for a fast track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. The FDA may review sections of the NDA for a fast track product on a rolling basis before the complete application is submitted. If the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

The FDA may give a priority review designation to drugs that are designed to treat serious conditions, and if approved, would provide a significant improvement in treatment, or provide a treatment where no adequate therapy exists. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months under current PDUFA guidelines. Under the current PDUFA agreement, these six and ten month review periods are measured from the "filing" date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review and decision from the date of submission. Most products that are eligible for fast track designation are also likely to be considered appropriate to receive a priority review.

In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may be eligible for accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has 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, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require a sponsor of a drug receiving accelerated approval to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug may be subject to accelerated withdrawal procedures.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act, a sponsor can request designation of a product candidate as a "breakthrough therapy." A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA must take certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. We may explore some of these opportunities for our product candidates as appropriate.

### *Post-Approval Requirements*

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

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

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

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

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

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, which regulates the distribution of drugs and drug samples at the federal level, and sets minimum

## [Table of Contents](#)

standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

### *Federal and State Fraud and Abuse, Data Privacy and Security, and Transparency Laws and Regulations*

In addition to FDA restrictions on marketing of pharmaceutical products, federal and state healthcare laws and regulations restrict business practices in the biopharmaceutical industry. These laws may impact, among other things, our current and future business operations, including our clinical research activities, and proposed sales, marketing and education programs and constrain the business or financial arrangements and relationships with healthcare providers and other parties through which we market, sell and distribute our products for which we obtain marketing approval. These laws include anti-kickback and false claims laws and regulations, data privacy and security, and transparency laws and regulations, including, without limitation, those laws described below.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting some common activities from prosecution, the exemptions and safe harbors are drawn narrowly. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchases or recommendations may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated.

A person or entity does not need to have actual knowledge of this 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 federal civil False Claims Act or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

Federal false claims laws, including the federal civil False Claims Act, prohibits any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. government. Several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies' marketing of products for unapproved, and thus non-reimbursable, uses.

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal criminal statutes that prohibit, among other things, knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, imposes specified requirements on certain types of individuals and entities relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA's security standards directly applicable to "business associates," defined as independent contractors or agents of covered entities that create, receive, maintain or

## [Table of Contents](#)

transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in certain circumstances, many of which are not pre-empted by HIPAA, differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

The federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other transfers of value made to physicians and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians and their immediate family members.

We may also be subject to 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, as well as state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, individual imprisonment, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, contractual damages, reputational harm, diminished profits and future earnings, disgorgement, exclusion from participation in government healthcare programs and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

### *Coverage and Reimbursement*

The future commercial success of our product candidates or any of our collaborators' ability to commercialize any approved product candidates successfully will depend in part on the extent to which governmental payor programs at the federal and state levels, including Medicare and Medicaid, private health insurers and other third-party payors provide coverage for and establish adequate reimbursement levels for our product candidates. Government health administration authorities, private health insurers and other organizations generally decide which drugs they will pay for and establish reimbursement levels for healthcare. In particular, in the United States, private health insurers and other third-party payors often provide reimbursement for products and services based on the level at which the government, through the Medicare or Medicaid programs, provides reimbursement for such treatments. In the United States, the European Union, or EU, and other potentially significant markets for our product candidates, government authorities and third party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which often has resulted in average selling prices lower than they would otherwise be. Further, the increased emphasis on managed healthcare in the United States and on country and regional pricing and reimbursement controls in the EU will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical coverage and reimbursement policies and pricing in general.

Third-party payors are increasingly imposing additional requirements and restrictions on coverage and limiting reimbursement levels for medical products. For example, federal and state governments reimburse covered

prescription drugs at varying rates generally below average wholesale price. These restrictions and limitations influence the purchase of healthcare services and products. Third-party payors may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in drug development. Legislative proposals to reform healthcare or reduce costs under government insurance programs may result in lower reimbursement for our products and product candidates or exclusion of our product candidates from coverage. The cost containment measures that healthcare payors and providers are instituting and any healthcare reform could significantly reduce our revenues from the sale of any approved product candidates. We cannot provide any assurances that we will be able to obtain and maintain third party coverage or adequate reimbursement for our product candidates in whole or in part.

#### *Impact of Healthcare Reform on our Business*

The United States and some foreign jurisdictions are considering enacting or have enacted a number of additional legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our product candidates profitably, if approved. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts, which include major legislative initiatives to reduce the cost of care through changes in the healthcare system, including limits on the pricing, coverage, and reimbursement of pharmaceutical and biopharmaceutical products, especially under government-funded health care programs, and increased governmental control of drug pricing.

There have been several U.S. government initiatives over the past few years to fund and incentivize certain comparative effectiveness research, including creation of the Patient-Centered Outcomes Research Institute under the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the PPACA. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's product could adversely affect the sales of our product candidates. If third-party payors do not consider our product candidates to be cost-effective compared to other available therapies, they may not cover our product candidates, once approved, as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our product on a profitable basis.

The PPACA became law in March 2010 and substantially changed the way healthcare is financed by both governmental and private insurers. Among other measures that may have an impact on our business, the PPACA establishes an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents; a new Medicare Part D coverage gap discount program; and a new formula that increases the rebates a manufacturer must pay under the Medicaid Drug Rebate Program. Additionally, the PPACA extends manufacturers' Medicaid rebate liability, expands eligibility criteria for Medicaid programs, and expands entities eligible for discounts under the Public Health Service pharmaceutical pricing program. At this time, we are unsure of the full impact that the PPACA will have on our business. There have been judicial and Congressional challenges to certain aspects of the PPACA, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the PPACA, and we expect such challenges and amendments to continue. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of any certain provisions of the PPACA or otherwise circumvent some of the requirements for health insurance mandated by the PPACA. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the PPACA have been signed into law. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the PPACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual



mandate.” Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain PPACA-mandated fees, including the so-called “Cadillac” tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the PPACA, effective January 1, 2019, to increase from 50 percent to 70 percent the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and to close the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.”

In addition, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and proposed and enacted state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration’s budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. While any proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures are increasingly passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

As a result of the PPACA, Medicare payments are increasingly tied to quality of care and value measures, and reporting of related data by providers such as physicians and hospitals. So called “value based reimbursement” measures may present challenges as well as potential opportunities for biopharmaceutical manufacturers. Medicare incentives for providers meeting certain quality measures may ultimately prove beneficial for manufacturers that are able to establish that their products may help providers to meet such measures. However, manufacturers’ ability to market their drug products based on quality or value is highly regulated and not always permissible. In addition, potentially decreased Medicare reimbursement to those providers that fail to adequately comply with quality reporting requirements could translate to decreased resources available to purchase products and may negatively impact marketing or utilization of our product candidates if they are approved for marketing. We cannot predict at this time what impact, if any, the longer-term shift towards value based reimbursement will have on any of our product candidates in either the Medicare program, or in any other third party payor programs that may similarly tie payment to provider quality.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. In August 2011, the President signed into law the Budget Control Act of 2011, as amended, which, among other things, included aggregate reductions to Medicare payments to providers of 2% per fiscal year, which began in 2013 and, following passage of subsequent legislation, including the BBA, will continue through 2027 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was enacted and, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These and other healthcare reform initiatives may result in additional reductions in Medicare and other healthcare funding.

#### **Foreign Regulation**

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our product candidates. For example, in the EU, we must obtain authorization of a clinical trial application, or CTA, in each member state in which we intend to conduct a clinical trial. Whether or not we obtain FDA approval for a drug, we would need to obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the drug in those countries. The approval process varies from country to country and can involve

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## [Table of Contents](#)

additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others.

### **Employees**

As of May 4, 2018, we had 20 full-time employees, 15 of whom were primarily engaged in research and development activities and 8 of whom had an M.D. or Ph.D. degree. None of our employees is represented by a labor union and we consider our employee relations to be good.

### **Facilities**

Our headquarters is currently located in South San Francisco, and consists of 24,357 square feet of leased office space under a lease that expires in February 2025. We believe that our facilities are adequate to meet our current needs.

### **Legal Proceedings**

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently a party to any material legal proceedings, and we are not aware of any pending or threatened legal proceeding against us that we believe could have an adverse effect on our business, operating results or financial condition.



**MANAGEMENT**

The following table sets forth information regarding our executive officers and directors, including their ages as of March 1, 2018:

<b>NAME</b>	<b>AGE</b>	<b>POSITION(S)</b>
<b>Executive Officers</b>		
John Fowler	46	Chief Executive Officer and Director
Christopher Kirk, Ph.D.	46	President, Chief Scientific Officer and Director
Marc L. Belsky	62	Chief Financial Officer and Secretary
Niti Goel, M.D.	50	Chief Medical Officer
<b>Non-Employee Directors</b>		
Jean-Pierre Sommadossi, Ph.D.(2)(3)	61	Chairman of the Board of Directors
Franklin M. Berger, CFA(1)(3)	68	Director
Bihua Chen*	49	Director
Graham Cooper(1)(2)	48	Director
Jason Dinges, Ph.D., J.D.(3)	42	Director
Michael Kauffman, M.D., Ph.D.(1)(2)	54	Director

(1) Member of our audit committee.

(2) Member of our compensation committee.

(3) Member of our nominating and corporate governance committee.

\* Ms. Chen has notified us that she will resign from our board of directors contingent upon and effective immediately prior to the effectiveness of the registration of our common stock as a class of securities pursuant to the Securities Exchange Act of 1934, as amended.

**Executive Officers**

**John Fowler** is our co-founder and has served as our Chief Executive Officer since March 2015 and as a member of our board of directors since February 2015. Prior to founding our company, Mr. Fowler was Chief Executive Officer of HealthCPA, a provider of patient advocacy and insurance navigation services, from June 2009 to October 2014. Mr. Fowler received his A.B. and M.B.A. degrees from Stanford University. We believe that Mr. Fowler's extensive knowledge of our company as co-founder and Chief Executive Officer, his experience as the chief executive officer of multiple companies and his management background and experience in the healthcare industry qualifies him to serve on our board of directors.

**Christopher Kirk, Ph.D.**, is our co-founder and has served as our President and Chief Scientific Officer since March 2015 and as a member of our board of directors since February 2015. Prior to founding our company, Dr. Kirk was the Vice President of Research at Onyx Pharmaceuticals, Inc., or Onyx, from April 2010 to April 2014. Dr. Kirk previously served as Director of Pharmacology and Biology at Onyx and at Proteolix, Inc. Dr. Kirk has served as a member of the Scientific Advisory Board at Karyopharm Therapeutics, Inc., C4 Therapeutics, Inc. and Avidity Biosciences LLC. Dr. Kirk received his B.S. degree in biochemistry from University of California, Davis, and his Ph.D. degree in cellular and molecular biology from the University of Michigan. We believe that Dr. Kirk's extensive knowledge of our company as co-founder and his experience at pharmaceutical companies and his scientific experience and achievements qualifies him to serve on our board of directors.

**Marc L. Belsky** has served as our Chief Financial Officer since March 2018 and Secretary since April 2018. Prior to joining us, from October 2009 to April 2018, Mr. Belsky held several roles at Five Prime Therapeutics, Inc., a publicly held biopharmaceutical company, including most recently as Senior Vice President and Chief Financial Officer. Prior to that, Mr. Belsky served in various roles at Cell Genesys, Inc., a biotechnology company acquired by BioSante Pharmaceuticals, Inc., Active Aero Group, Inc., DataWave Systems Inc. and Michigan National Corporation, a holding company for Michigan National Bank, which was acquired by BANA Holding Corporation. Mr. Belsky started his career as an auditor with Coopers & Lybrand. Mr. Belsky received a B.S. degree in accounting from Wayne State University and an M.B.A. degree from the University of Michigan. He is a certified public accountant.

**Niti Goel, M.D.**, has served as our Chief Medical Officer since April 2018. Since March 2011, Dr. Goel has served as an adjunct Assistant Professor of Medicine at Duke University School of Medicine. From August 2012 to April 2018,

she held several roles at IQVIA, The Human Data Science Company, including Vice President, Advisory Services, Strategic Drug Development, Principal Scientific Advisor and Head, Rheumatology Center of Excellence. Prior to that, Dr. Goel served in various roles at Array BioPharma Inc. and UCB Pharma, each a publicly held biopharmaceutical company, and The Procter & Gamble Company, a publicly held consumer goods corporation. Dr. Goel received a B.S. degree in science from Pennsylvania State University and her M.D. degree from Jefferson Medical College of Thomas Jefferson University.

#### **Non-Employee Directors**

**Jean-Pierre Sommadossi, Ph.D.**, has served as a member of our board of directors since June 2015. Dr. Sommadossi has served as the Founder, Chief Executive Officer and Chairman of Atea Pharmaceuticals, Inc. since December 2013. Prior to that, he co-founded Pharmasset, Inc. and held several roles at Idenix Pharmaceuticals, Inc., including principal founder and Chief Executive Officer and Chairman. Dr. Sommadossi serves as the Vice Chair of the board of directors of Rafael Pharmaceuticals, Inc., a privately held therapeutics company. He is also a member of the Harvard Medical School Discovery Council and a Senior Advisor to PureTech Ventures. Dr. Sommadossi received his Ph.D. and Pharm.D. degrees from the University of Marseilles in France. We believe that Dr. Sommadossi's over 30 years of scientific, operational, strategic and management experience in the biotech industry qualifies him to serve on our board of directors.

**Franklin M. Berger, CFA**, has served as a member of our board of directors since November 2016. Mr. Berger worked at Sectoral Asset Management as a founder of the small-cap focused NEMO Fund from January 2007 through June 2008. Prior to that, he served at J.P. Morgan Securities, most recently as Managing Director, Equity Research and Senior Biotechnology Analyst and served in similar capacities at Salomon Smith Barney and Josephthal & Co. Mr. Berger has served as a member of the board of directors of Five Prime Therapeutics, Inc. since October 2014, Immune Design Corp. since March 2014, Bellus Health, Inc. since May 2010, ESSA Pharma, Inc. since March 2015, and Proteostasis Therapeutics, Inc. since February 2016. Mr. Berger previously served as a member of the board of directors BioTime, Inc. and Seattle Genetics, Inc., both publicly held biotechnology companies. Mr. Berger received a B.A. degree in international relations and a M.A. degree in international economics from Johns Hopkins University, and an M.B.A. degree from the Harvard Business School. We believe that Mr. Berger's financial background and experience in the biotechnology industry combined with his experience serving on the boards of directors of multiple public companies qualifies him to serve on our board of directors.

**Bihua Chen** has served as a member of our board of directors since June 2017. Ms. Chen is the founder of Cormorant Asset Management, LLC, or Cormorant, and has been its portfolio manager since Cormorant's inception in 2013. Prior to founding Cormorant, Ms. Chen managed a separately managed account focused on the healthcare sector as a sub-adviser to Millennium Management LLC, a large, multi-strategy hedge fund based in New York. Ms. Chen was also previously a healthcare analyst/sector portfolio manager for American Express Asset Management Boston and served as a portfolio manager for the Asterion Life Science Fund, an equity analyst/portfolio manager for Bellevue Research, and an equity analyst for Putnam Investment. Ms. Chen received an M.B.A. degree from Wharton School of Business at the University of Pennsylvania, a M.Sc. degree in molecular biology from the Graduate School of Biomedical Science at Cornell Medical College and a B.S. degree in genetics and genetic engineering from Fudan University, Shanghai, China. We believe that Ms. Chen's financial and investment management expertise qualifies her to serve on our board of directors.

**Graham Cooper** has served as a member of our board of directors since October 2017. Mr. Cooper served as the Chief Financial Officer of Receptos, Inc. from February 2013 to August 2015 and as the Chief Financial Officer and Executive Vice President of Finance & Business Development at Geron Corporation from January 2012 to December 2012. Prior to that, Mr. Cooper served as Chief Financial Officer of Orexigen Therapeutics, Inc. and held several positions at Deutsche Bank Securities, including Director, Health Care Investment Banking. Mr. Cooper also worked as an accountant at Deloitte & Touche LLP, where he earned his CPA. Mr. Cooper served as a member of the board of directors of Celladon Corporation. Mr. Cooper received a B.A. degree in economics from the University of California at Berkeley and an M.B.A. degree from the Stanford Graduate School of Business. We believe that Mr. Cooper's financial expertise and executive experience at life sciences companies qualifies him to serve on our board of directors.

**Jason R. Dinges, Ph.D., J.D.**, has served as a member of our board of directors since April 2018. Since February 2011, Dr. Dinges has served as an investment advisor at Morningside Technology Advisory LLC. Prior to that,

## [Table of Contents](#)

Dr. Dinges was an associate attorney at Foley & Lardner LLP, practicing intellectual property law in the firm's Chemical, Biotechnology and Pharmaceutical practice group. Dr. Dinges also serves on the board of directors of various privately held biotechnology companies. Dr. Dinges received his Ph.D. degree in genetics from Iowa State University and a J.D. degree from the University of Iowa College of Law. We believe that Dr. Dinges' scientific and legal training and experience in life science investments qualifies him to serve on our board of directors.

**Michael Kauffman, M.D., Ph.D.**, has served as a member of our board of directors since December 2016. Dr. Kauffman co-founded Karyopharm Therapeutics, Inc. in 2008 and has served as its Chief Executive Officer since January 2011 and as a member of its board of directors since 2008. Dr. Kauffman also served as the President of Karyopharm Therapeutics, Inc. from January 2011 to December 2013 and as its Chief Medical Officer from December 2012 to December 2013. Prior to that, Dr. Kauffman served as Chief Medical Officer at Onyx, and as Chief Medical Officer of Proteolix, Inc. Dr. Kauffman also served as President and Chief Executive Officer of both Epix Pharmaceuticals, Inc. and Predix Pharmaceuticals, Inc., and was an operating partner at Bessemer Venture Partners. Dr. Kauffman also held a number of senior positions at Millennium Pharmaceuticals, Inc. and Biogen Idec, Inc. Dr. Kauffman has served on the board of directors of Verastem Inc., a publicly held biopharmaceutical company, since November 2012. Dr. Kauffman received his B.A. degree in biochemistry from Amherst College and his M.D. and Ph.D. degrees in immunology from Johns Hopkins Medical School. We believe that Dr. Kauffman's business and leadership experience at life sciences companies and his medical and scientific background qualifies him to serve on our board of directors.

### **Family Relationships**

There are no family relationships among our directors and executive officers.

### **Board Composition**

Our board of directors currently consists of eight members. In accordance with our amended and restated certificate of incorporation, which will be effective immediately after the completion of this offering, our board of directors will be divided into three classes. At each annual general meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- The Class I director will be Michael Kauffman and Jason R. Dinges such their terms will expire at the annual meeting of stockholders to be held in 2019;
- The Class II directors will be Franklin M. Berger and Graham Cooper, and their terms will expire at the annual meeting of stockholders to be held in 2020; and
- The Class III directors will be John Fowler, Christopher Kirk and Jean-Pierre Sommadossi, and their terms will expire at the annual meeting of stockholders to be held in 2021.

We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

### **Director Independence**

Under The Nasdaq Stock Market LLC, or Nasdaq, Marketplace Rules, or the Nasdaq Listing Rules, independent directors must comprise a majority of our board of directors as a public company within one year of listing.

Our board of directors has undertaken a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that all of our directors except John Fowler and Christopher Kirk, representing six of our eight directors, do not have any relationships 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 applicable rules and regulations of the SEC and the listing requirements of the Nasdaq Listing Rules. Our board of directors has determined that Mr. Fowler, by virtue of his position as our Chief Executive Officer, and Dr. Kirk, by

virtue of his position as our President and Chief Scientific Officer, are not independent under applicable rules and regulations of the SEC and the Nasdaq Listing Rules. In making this determination, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

## **Board Committees**

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Each committee has adopted a written charter that satisfies the applicable rules and regulations of the SEC and Nasdaq Listing Rules, which we will post on our website at [www.kezarlifesciences.com](http://www.kezarlifesciences.com) upon completion of this offering.

### ***Audit Committee***

The audit committee is responsible for assisting our board of directors in its oversight of the integrity of our consolidated financial statements, the qualifications and independence of our independent auditors and our internal financial and accounting controls. The audit committee has direct responsibility for the appointment, compensation, retention (including termination) and oversight of our independent auditors, and our independent auditors report directly to the audit committee. The audit committee also prepares the audit committee report that the SEC requires to be included in our annual proxy statement.

Our audit committee consists of Franklin M. Berger, Graham Cooper and Michael Kauffman. Our board of directors has determined that all members are independent under the Nasdaq Listing Rules and Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The chair of our audit committee is Mr. Cooper. Our board of directors has determined that Franklin M. Berger and Graham Cooper are each an "audit committee financial expert" as such term is currently defined in Item 407(d)(5) of Regulations S-K. Our board of directors has also determined that each member of our audit committee can read and understand fundamental financial statements, in accordance with applicable requirements. In arriving at these determinations, the board of directors has examined each audit committee member's scope of experience and the nature of their employment in the corporate finance sector.

### ***Compensation Committee***

The compensation committee approves the compensation objectives for the company, the compensation of the chief executive officer and approves, or recommends to our board of directors for approval, the compensation for other executives. The compensation committee reviews all compensation components, including base salary, bonus, benefits and other perquisites.

Our compensation committee consists of Jean-Pierre Sommadossi, Graham Cooper and Michael Kauffman. Our board of directors has determined that all members are independent under the Nasdaq Listing Rules and are "non-employee directors" as defined in Rule 16b-3 promulgated under the Exchange Act. The chair of our compensation committee is Mr. Kauffman.

### ***Nominating and Corporate Governance Committee***

The nominating and corporate governance committee makes recommendations regarding corporate governance, the composition of our board of directors, identification, evaluation and nomination of director candidates and the structure and composition of committees of our board of directors. In addition, the nominating and corporate governance committee is responsible for developing and recommending corporate governance guidelines to our board of directors, as applicable to the company.

Our nominating and corporate governance committee consists of Franklin M. Berger, Jason R. Dinges and Jean-Pierre Sommadossi. The chair of our nominating and corporate governance committee is Mr. Berger. Each member of the nominating and corporate governance committee is a non-employee director within the meaning of Rule 16b-3 of the rules promulgated under the Exchange Act, an independent director as defined by the Nasdaq Listing Rules and is free from any relationship that would interfere with the exercise of his or her independent judgment, as determined by the board of directors in accordance with the applicable Nasdaq Listing Rules.

### **Compensation Committee Interlocks and Insider Participation**

None of the members of the compensation committee is currently, or has been at any time, one of our executive officers or employees. None of our executive officers currently serves, or has served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or on our compensation committee.

### **Code of Business Conduct and Ethics**

We have adopted a written code of business conduct and ethics that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions, and agents and representatives. The full text of our code of business conduct and ethics will be posted on our website at [www.kezarlifesciences.com](http://www.kezarlifesciences.com) upon completion of this offering. The nominating and corporate governance committee of our board of directors will be responsible for overseeing our code of business conduct and ethics and any waivers applicable to any director, executive officer or employee. We intend to disclose future amendments to certain provisions of our code of business conduct and ethics, or waivers of such provisions applicable to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and agents and representatives, on our website identified above.

### **Limitation on Liability and Indemnification Matters**

Our amended and restated certificate of incorporation, which will become effective immediately after the completion of this offering, and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, limits our directors' liability, and may indemnify our directors and officers to the fullest extent permitted under Delaware General Corporation Law, or the DGCL. The DGCL provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for any:

- transaction from which the director derives an improper personal benefit;
- act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or redemption of shares; or
- breach of a director's duty of loyalty to the corporation or its stockholders.

These limitations of liability do not apply to liabilities arising under federal securities laws and do not affect the availability of equitable remedies such as injunctive relief or recession.

The DGCL and our amended and restated bylaws provide that we will, in certain situations, indemnify our directors and officers and may indemnify other employees and other agents, to the fullest extent permitted by law. Any indemnified person is also entitled, subject to certain limitations, to advancement, direct payment or reimbursement of reasonable expenses (including attorneys' fees and disbursements) in advance of the final disposition of the proceeding.

In addition, we have entered, and intend to continue to enter, into separate indemnification agreements with some of our directors and officers. These indemnification agreements, among other things, require us to indemnify our directors and officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or officer in any action or proceeding arising out of their services as a director or officer, or any other company or enterprise to which the person provides services at our request.

We maintain a directors' and officers' insurance policy pursuant to which our directors and officers are insured against liability for actions taken in their capacities as directors and officers. We believe that these provisions in our amended and restated certificate of incorporation and amended and restated bylaws and these indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to directors, officers or control persons, in the opinion of the SEC, such indemnification is against public policy, as expressed in the Securities Act and is therefore unenforceable.

**EXECUTIVE AND DIRECTOR COMPENSATION**

Our named executive officers for the year ended December 31, 2017, which consist of our principal executive officer and our other most highly compensated executive officer, are:

- John Fowler, our Chief Executive Officer; and
- Christopher Kirk, Ph.D., our President and Chief Scientific Officer.

Because only two individuals served as our executive officers at any time during the year ended December 31, 2017, we had only two named executive officers for that year.

**Summary Compensation Table**

The following table provides information regarding the compensation provided to our named executive officers for the year ended December 31, 2017.

<b>NAME AND PRINCIPAL POSITION</b>	<b>YEAR</b>	<b>SALARY (1) (\$)</b>	<b>OPTION AWARDS (\$ (2))</b>	<b>NON-EQUITY INCENTIVE PLAN COMPENSATION (\$ (3))</b>	<b>ALL OTHER COMPENSATION (\$ (4))</b>	<b>TOTAL (\$)</b>
John Fowler <i>Chief Executive Officer</i>	2017	360,000	298,476	130,000	10,800	799,276
Christopher Kirk, Ph.D. <i>President and Chief Scientific Officer</i>	2017	325,000	298,476	111,000	10,800	745,276

(1) Salary amounts represent actual amounts paid during 2017. See “—Narrative to the Summary Compensation Table—Annual Base Salary” below.

(2) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during fiscal year 2017 computed in accordance with ASC 718 for stock-based compensation transactions. Assumptions used in the calculation of these amounts are included in Note 6 to our audited consolidated financial statements included elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

(3) Reflects performance-based cash bonuses awarded to our named executive officers. See “—Non-Equity Incentive Plan Compensation” below for a description of the material terms pursuant to which this compensation was awarded.

(4) The amounts represent matching contributions made by us to the named executive officer’s 401(k) plan account.

**Narrative to the Summary Compensation Table**

Our board of directors reviews compensation annually for all employees, including our named executive officers. In setting executive base salaries and bonuses and granting equity incentive awards, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders and a long-term commitment to our company.

Either our board of directors or the compensation committee has historically determined our executive officers’ compensation and has typically reviewed and discussed management’s proposed compensation with our chief executive officer for all executives other than our chief executive officer. Based on those discussions and its discretion, the compensation committee and our full board of directors then approved the compensation of each executive officer. Upon the completion of this offering, the compensation committee will determine our executive officers’ compensation and follow this process, but the compensation committee itself, rather than our board of directors, will approve the compensation of each executive officer.

**Annual Base Salary**

Base salaries for our executive officers are initially established through arm’s-length negotiations at the time of the executive officer’s hiring, taking into account such executive officer’s qualifications, experience, the scope of his or her responsibilities and competitive market compensation paid by other companies for similar positions within the

## [Table of Contents](#)

industry and geography. Base salaries are reviewed annually, typically in connection with our annual performance review process, and adjusted from time to time to realign salaries with market levels after taking into account individual responsibilities, performance and experience. In making decisions regarding salary increases, we may also draw upon the experience of members of our board of directors with executives at other companies. The 2017 and 2018 base salaries for our named executive officers are as follows:

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<b>NAME</b>	<b>2017 BASE SALARY (\$)</b>	<b>2018 BASE SALARY (\$)</b>
John Fowler	360,000	460,000
Christopher Kirk, Ph.D.	325,000	365,000

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### ***Equity-Based Incentive Awards***

Our equity-based incentive awards are designed to align our interests and those of our stockholders with those of our employees and consultants, including our named executive officers. As of December 31, 2017, stock option awards were the only form of equity awards we granted to our named executive officers.

We have historically used stock options as an incentive for long-term compensation to our named executive officers because they are able to profit from stock options only if our stock price increases relative to the stock option's exercise price, which exercise price is set at the fair market value of our common stock on the date of grant. We may grant equity awards at such times as our board of directors determines appropriate. In October 2017, Mr. Fowler and Dr. Kirk were each awarded a stock option in connection with their employment with us. Additional grants may occur periodically in order to specifically incentivize executives with respect to achieving certain corporate goals or to reward executives for exceptional performance.

Prior to this offering, all of the stock options we have granted were made pursuant to our 2015 Plan. Following this offering, we will grant equity incentive awards under the terms of our 2018 Plan. The terms of our equity plans are described below under "—Equity Incentive Plans."

All options are granted with an exercise price per share that is no less than the fair market value of our common stock on the date of grant of such award. Our stock option awards generally vest over a four-year period, and may be subject to acceleration of vesting and exercisability under certain termination and change in control events. See "—Outstanding Equity Awards at Fiscal Year-End" below for additional information.

### ***Non-Equity Incentive Plan Compensation***

From time to time, our board of directors or compensation committee may approve annual bonuses for our named executive officers based on individual performance, company performance or as otherwise determined appropriate. In 2017, our named executive officers were eligible to earn an annual target performance bonus of 40% of each executive's 2017 base salary based on achievement of certain corporate objectives. The compensation committee determined that Mr. Fowler and Dr. Kirk were entitled to approximately 90% and 85%, respectively, of their target bonuses.



### Outstanding Equity Awards at Fiscal Year-End

The following table provides information regarding the outstanding equity awards held by our named executive officers as of December 31, 2017. All awards were granted pursuant to the 2015 Plan. See “—Equity Incentive Plans—2015 Equity Incentive Plan” below for additional information.

NAME AND PRINCIPAL POSITION	GRANT DATE	VESTING COMMENCEMENT DATE	OPTION AWARDS			
			NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) (EXERCISABLE)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS (#) (UNEXERCISABLE) (1)(2)	OPTION EXERCISE PRICE (\$)	OPTION EXPIRATION DATE
<b>John Fowler</b>						
<i>Chief Executive Officer</i>	9/10/2015	6/11/2015	101,022	55,399	0.90	9/9/2025
	9/15/2016	6/11/2016	19,369	29,563	1.41	9/14/2026
	10/10/2017	7/21/2017	—	177,935	2.37	10/9/2027
<b>Christopher Kirk, Ph.D.</b>						
<i>President and Chief Scientific Officer</i>	9/10/2015	6/11/2015	101,022	55,399	0.90	9/9/2025
	9/15/2016	6/11/2016	17,608	26,875	1.41	9/14/2026
	10/10/2017	7/21/2017	—	177,935	2.37	10/9/2027

(1) Of the shares underlying each option 25% vest on the one-year anniversary of the vesting commencement date and the remainder vest in 36 equal monthly installments thereafter on the last day of each month.

(2) Any nonvested shares underlying each option will become fully vested and exercisable upon a change in control (as defined in the 2015 Plan).

### Employment Arrangements

We entered into amended employment agreements with each of our named executive officers in June 2018. Below are descriptions of our employment agreements and arrangements with our named executive officers. The agreements generally provide for at-will employment without any specific term and set forth the named executive officer’s initial base salary, eligibility for employee benefits and severance benefits upon a qualifying termination of employment or change in control of our company. Each of our named executive officers has executed a form of our standard confidential information and inventions assignment agreement. The key terms of the employment agreements with our named executive officers, including potential payments upon termination or change in control, are described below.

#### **Agreement with Mr. Fowler**

Pursuant to Mr. Fowler’s amended employment agreement, he is entitled to an annual base salary of \$460,000, which may be adjusted from time to time, is eligible to receive an annual target performance bonus of up to 50% of his base salary, as determined by our board of directors or compensation committee, and is eligible to participate in all of the employee benefit plans that we generally make available to all of our employees. Additionally, Mr. Fowler is entitled to certain severance benefits pursuant to his agreement, the terms of which are described under “—Severance Benefits” below.

#### **Agreement with Dr. Kirk**

Pursuant to Dr. Kirk’s amended employment agreement, he is entitled to an annual base salary of \$365,000, which may be adjusted from time to time, is eligible to receive an annual target performance bonus of up to 35% of his base salary, as determined by our board of directors or compensation committee, and is eligible to participate in all of the employee benefit plans that we generally make available to all of our employees. Additionally, Dr. Kirk is entitled to certain severance benefits pursuant to his agreement, the terms of which are described under “—Severance Benefits” below.



## Potential Payments upon Termination or Change in Control

Regardless of the manner in which a named executive officer's employment with us terminates, the named executive officer is entitled to receive amounts earned during his term of service, including salary and accrued unused vacation pay. In addition, each of our named executive officers is eligible to receive certain benefits pursuant to his employment agreement with us described above under "—Employment Arrangements" above.

### Severance Benefits

Under the terms of their respective employment agreements, regardless of the manner in which a named executive officer's service terminates, the named executive officer is entitled to receive amounts earned during his term of service, including salary and accrued unused vacation pay.

In the event of a qualifying termination, which includes an involuntary termination without "cause" or due to "permanent disability" and a "resignation for good reason," each of our named executive officers is eligible to receive (i) a payment equal to the sum of monthly base salary plus "pro-rata bonus," multiplied by 12, and (ii) 12 months of payments equal to the monthly cost of their health insurance premiums at the time of termination, in each case, subject to their execution of a separation agreement and general release of claims in favor of our company.

Alternatively, upon a qualifying termination which occurs three months prior to, or within twelve months following the effective date of a "change in control," each of our named executive officers is eligible to receive (i) a payment equal to the sum of monthly base salary plus "pro-rata bonus," multiplied by 18, and (ii) 18 months of payments equal to the monthly cost of their health insurance premium at the time of termination, in each case, subject to their execution of a separation agreement and general release in favor of our company.

Any severance benefits due to our named executive officers are payable in accordance with our standard payroll procedure commencing on the first regularly-scheduled payroll date occurring on or after their termination.

For purposes of each of the employment agreements with our named executive officers:

- "cause" means a determination by the company based upon reasonably available information of the named executive officer's:
  - (i) unauthorized use or disclosure of the company's confidential information or trade secrets, which use or disclosure causes harm to the company;
  - (ii) material breach of any agreement to which the named executive officer and the company are a party resulting in harm to the company;
  - (iii) failure to comply with the company's written policies or rules resulting in material harm to the company;
  - (iv) conviction of, or plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State;
  - (v) negligence or willful misconduct relating to the named executive officer's performance of his duties on behalf of the company resulting in material harm to the company;
  - (vi) continuing failure to perform material and lawful assigned duties after receiving written notification of the failure from the company's chief executive officer; or
  - (vii) failure to cooperate in good faith with a governmental or internal investigation of the company or its directors, officers or employees, if the company has requested the named executive officer's cooperation without prejudice or personal liability to the named executive officer. With respect to clause (vi), the named executive officer will be given written notice and a 30-day period in which to cure such breach. The named executive officer agrees that the breach of any confidentiality obligation to the company or any subsidiary shall not be curable to any extent.
- "change in control" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events: (i) the acquisition by a natural person or entity of securities of the company representing more than 50% of our combined voting power other than by a merger, consolidation or similar transaction, except for certain transactions that are primarily a private financing for the company or that result in an increase to the level of ownership above the specified level solely as a result of a repurchase or other acquisition of voting securities by the company reducing the number of shares outstanding; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own, directly or indirectly, more than 50% of the combined voting power of the surviving entity or its parent; or (iii) a consummated sale, lease, license or other disposition of all or substantially all of our assets other than to certain related parties.

## [Table of Contents](#)

- “dissolution event” means the stockholders of the company or our board of directors approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the company shall otherwise occur.
- “permanent disability” means total and permanent disability as defined in Section 22(e)(3) of the Code.
- “pro-rata bonus” means 1/12th of the greater of (i) the average target performance bonus paid to the named executive officer for the three years preceding the date of termination or (ii) annual target performance cash bonus, as in effect on the date of termination.
- “resignation for good reason” means the named executive officer’s resignation from all employee positions he then holds with the company within 90 days following any of the following events taken without the named executive officer’s consent, provided the named executive officer has given the company written notice of the event within 30 days after the first occurrence of the event and the company has not cured the event within 30 days thereafter:
  - a material decrease in the named executive officer’s annual base salary, other than in connection with a decrease in compensation for all comparable executives of the company;
  - the named executive officer’s duties or responsibilities are materially diminished (not simply a change in title), other than in connection with a change in control following which the company survives as a separate legal entity or business unit and the named executive officer holds materially the same position in the legal entity or business unit as he held before the change in control;
  - a relocation of the named executive officer’s principal place of work outside of a 50-mile radius of its current location; or
  - the company’s material breach of the named executive officer’s employment agreement.

### **Equity Acceleration**

Under each of our named executive officer’s employment agreements, in the event of a qualifying termination, which includes an involuntary termination without “cause” or due to “permanent disability,” and a “resignation for good reason,” or a qualifying termination which occurs three months prior to, or within twelve months following the effective date of a “change in control,” the vesting of all outstanding stock options and any other equity incentive awards held by Mr. Fowler and Dr. Kirk will be accelerated in full, the period during which each stock option may be exercised will be the date that is 90 days after such termination date, and any reacquisition or repurchase rights applicable to any shares issued or issuable to Mr. Fowler and Dr. Kirk under any equity incentive awards will lapse, subject to their execution of a separation agreement and general release of claims in favor of our company.

In addition, the stock option agreements for all of the options granted to Mr. Fowler and Dr. Kirk to date provide that upon a change in control, the vesting of the nonvested shares subject to the option shall be accelerated in full. The equity awards that we have granted, and may in the future grant, to our named executive officers under our equity incentive plans are also subject to the termination and change in control provisions of such plans. For a description of the termination and change in control provisions in such equity incentive plans applicable to these stock awards, see “—Equity Incentive Plans” below for additional information.

### **Health and Welfare Benefits**

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental and vision insurance plans, in each case on the same basis as all of our other employees.

### **401(k) Plan**

Our named executive officers are eligible to participate in a defined contribution retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees may defer eligible compensation on a pre-tax or after-tax (Roth) basis, up to the statutorily prescribed annual limits on contributions under the Code. Contributions are allocated to each participant’s individual account and are then invested in selected investment alternatives according to the participants’ directions. Employees are immediately and fully vested in their contributions. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan’s related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan (except for Roth contributions) and earnings on those contributions

are not taxable to the employees until distributed from the 401(k) plan. During 2017, we made 100% matching contributions on up to 4% of an employee's eligible deferred compensation.

## **Equity Incentive Plans**

### **2018 Equity Incentive Plan**

Our board of directors adopted and our stockholders approved our 2018 Equity Incentive Plan, or 2018 Plan, in June 2018 and 2018, respectively. The 2018 Plan will become effective immediately prior to the execution of the underwriting agreement related to this offering, at which point no further grants will be made under our 2015 Equity Incentive Plan, or 2015 Plan, described below. No awards have been granted and no shares of our common stock have been issued under our 2018 Plan.

*Stock Awards.* The 2018 Plan provides for the grant of incentive stock options, or ISOs, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, or the Code, nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, which are collectively referred to as stock awards. Additionally, the 2018 Plan provides for the grant of performance cash awards. ISOs may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

*Share Reserve.* Initially, subject to adjustment as provided in the 2018 Plan, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2018 Plan will not exceed 4,000,000 shares, which is the sum of (i) 1,600,692 shares plus (ii) the number of shares reserved, and remaining available for issuance, under our 2015 Plan at the time our 2018 Plan became effective and (iii) the number of shares subject to stock options or other stock awards granted under our 2015 Plan that expire, terminate are forfeited or otherwise not issued, or are withheld to satisfy a tax withholding obligation in connection with an award or to satisfy a purchase or exercise price of an award (such as upon the expiration or termination of a stock award prior to vesting). The number of shares of our common stock reserved for issuance under our 2018 Plan will automatically increase on January 1 of each year, beginning on January 1, 2019 and continuing through and including January 1, 2028, by 5% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2018 Plan is 12,500,000 shares.

If a stock award granted under the 2018 Plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2018 Plan. In addition, the following types of shares under the 2018 Plan may become available for the grant of new stock awards under the 2018 Plan: (i) shares that are forfeited to or repurchased by us prior to becoming fully vested; (ii) shares withheld to satisfy income or employment withholding taxes; or (iii) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2018 Plan may be previously unissued shares or reacquired shares bought by us on the open market.

The maximum number of shares of common stock subject to stock awards granted under the 2018 Plan or otherwise during any one calendar year to any non-employee director, taken together with any cash fees paid by us to such non-employee director during such calendar year for service on the board of directors, will not exceed \$750,000 in total value (calculating the value of any such stock awards based on the grant date fair value of such stock awards for financial reporting purposes), or, with respect to the calendar year in which a non-employee director is first appointed or elected to our board of directors, \$1,100,000.

*Administration.* Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2018 Plan. Our board of directors may also delegate to one or more of our officers the authority to (i) designate employees (other than other officers) to be recipients of certain stock awards, (ii) determine the number of shares of common stock to be subject to such stock awards and (iii) specify the other terms and conditions, including the strike price or purchase price and vesting schedule, applicable to such awards. Subject to the terms of the 2018 Plan, our board of directors or the authorized committee, referred to as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to

## [Table of Contents](#)

the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2018 Plan. Subject to the terms of our 2018 Plan, the plan administrator has the authority, without stockholder approval, to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

*Stock Options.* ISOs and NSOs are evidenced by stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2018 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2018 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2018 Plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term will automatically be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an option holder's service relationship with us or any of our affiliates ceases due to disability or death, or an option holder dies within a certain period following cessation of service, the option holder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (i) cash, check, bank draft or money order, (ii) a broker-assisted cashless exercise, (iii) the tender of shares of our common stock previously owned by the option holder, (iv) a net exercise of the option if it is an NSO and (v) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An option holder may designate a beneficiary, however, who may exercise the option following the option holder's death.

*Tax Limitations on ISOs.* The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an option holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will be treated as NSOs. No ISOs may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (i) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (ii) the term of the ISO does not exceed five years from the date of grant.

*Restricted Stock Awards.* Restricted stock awards are evidenced by restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (i) cash, check, bank draft or money order, (ii) services rendered to us or our affiliates or (iii) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule as determined by the plan administrator. Rights to acquire shares under a restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Restricted Stock Unit Awards.* Restricted stock unit awards are evidenced by restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal

consideration or for no consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Rights under a restricted stock units award may be transferred only upon such terms and conditions as set by the plan administrator. Restricted stock unit awards may be subject to vesting as determined by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Stock Appreciation Rights.* Stock appreciation rights are evidenced by stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount in cash or stock equal to (i) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (ii) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2018 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2018 Plan, up to a maximum of 10 years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term will be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Unless the plan administrator provides otherwise, stock appreciation rights generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. A stock appreciation right holder may designate a beneficiary, however, who may exercise the stock appreciation right following the holder's death.

*Performance Awards.* The 2018 Plan permits the grant of performance-based stock and cash awards. The performance goals that may be selected include one or more of the following: (1) sales; (2) revenues; (3) assets; (4) expenses; (5) market penetration or expansion; (6) earnings from operations; (7) earnings before or after deduction for all or any portion of interest, taxes, depreciation, amortization, incentives, service fees or extraordinary or special items, whether or not on a continuing operations or an aggregate or per share basis; (8) net income or net income per common share (basic or diluted); (9) return on equity, investment, capital or assets; (10) one or more operating ratios; (11) borrowing levels, leverage ratios or credit rating; (12) market share; (13) capital expenditures; (14) cash flow, free cash flow, cash flow return on investment, or net cash provided by operations; (15) stock price, dividends or total stockholder return; (16) development of new technologies or products; (17) sales of particular products or services; (18) economic value created or added; (19) operating margin or profit margin; (20) customer acquisition or retention; (21) raising or refinancing of capital; (22) successful hiring of key individuals; (23) resolution of significant litigation; (24) acquisitions and divestitures (in whole or in part); (25) joint ventures and strategic alliances; (26) spin-offs, split-ups and the like; (27) reorganizations; (28) recapitalizations, restructurings, financings (issuance of debt or equity) or refinancings; (29) strategic business criteria, consisting of one or more objectives based on the following goals: achievement of timely development, design management or enrollment, meeting specified market penetration or value added, payor acceptance, patient adherence, peer reviewed publications, issuance of new patents, establishment of or securing of licenses to intellectual property, product development or introduction (including, without limitation, any clinical trial accomplishments, regulatory or other filings, approvals or milestones, discovery of novel products, maintenance of multiple products in pipeline,

## [Table of Contents](#)

product launch or other product development milestones), geographic business expansion, cost targets, cost reductions or savings, customer satisfaction, operating efficiency, acquisition or retention, employee satisfaction, information technology, corporate development (including, without limitation, licenses, innovation, research or establishment of third party collaborations), development of new technologies, manufacturing or process development, legal compliance or risk reduction, patent application or issuance goals, or goals relating to acquisitions, divestitures or other business combinations (in whole or in part), joint ventures or strategic alliances; and (30) other measures of performance selected by the Board.

The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise in the award agreement at the time the award is granted or in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any items that are unusual in nature or occur infrequently as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock-based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; (12) to exclude the effect of any other unusual, nonrecurring gain or loss or other extraordinary item; and (13) to exclude the effects of the timing of acceptance for review and/or approval of submission to the U.S. Food and Drug Administration or any other regulatory body. In addition, we retain the discretion to adjust or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

*Other Stock Awards.* The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (i) the class and maximum number of shares reserved for issuance under the 2018 Plan, (ii) the class and maximum number of shares by which the share reserve may increase automatically each year, (iii) the class and number of shares that may be issued upon the exercise of ISOs and (iv) the class and number of shares and exercise price, strike price or purchase price, if applicable, of all outstanding stock awards.

*Corporate Transactions.* In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate or for no consideration; or



- make a payment equal to the excess of (i) the value of the property the participant would have received upon exercise of the stock award over (ii) the exercise price or strike price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2018 Plan, a significant corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 50% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

*Change in Control.* In the event that the surviving corporation or successor corporation (or its parent company) in a change in control transaction does not assume or substitute for any outstanding share award held by any participant whose continuous service has not terminated before the effective time of the change in control, then contingent upon the closing of the transaction, the participant will fully vest in and, to the extent applicable, have the right to exercise all of his or her share awards. In addition, all restrictions on share awards will lapse, and, with respect to any share award with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met. Unless otherwise determined by our board of directors, we will notify the participant in writing or electronically that any options or share appreciation rights held by the participant with accelerated vesting will be exercisable for a period of time determined by the board in its sole discretion, and the options or share appreciation rights will terminate upon the expiration of that period. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability or settlement in the event of a change in control. Under the 2018 Plan, a change in control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction, (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity, (iii) a consummated sale, lease or exclusive license or other disposition of all or substantially all of our consolidated assets and (iv) certain dissolutions and liquidations.

*Amendment and Termination.* Our board of directors has the authority to amend, suspend or terminate our 2018 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent and provided further that certain types of amendments will require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2018 Plan.

#### **2015 Equity Incentive Plan**

Our board of directors and our stockholders approved the Kezar Life Sciences, Inc. 2015 Equity Incentive Plan, or 2015 Plan, in June 2015. The 2015 Plan was subsequently amended by our board of directors and stockholders, most recently in June 2017.

*Awards.* The 2015 Plan provides for the grant of incentive stock options, or ISOs, nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards and restricted stock unit awards, or collectively, stock awards. With the exception of ISOs, all stock awards may be granted to employees, including officers, and to non-employee directors and consultants of us and our affiliates. ISOs may be granted only to employees. We have only granted stock options under the 2015 Plan.

*Share Reserve.* The aggregate number of shares of our common stock reserved for issuance pursuant to stock awards under our 2015 Plan is 2,647,919 shares. As of March 31, 2018, options to purchase 1,354,965 shares of common stock were outstanding under our 2015 Plan.

Shares subject to stock awards granted under our 2015 Plan that are forfeited, expire, are withheld to satisfy withholding taxes, are used to pay the exercise price or become unexercisable without having been exercised in full will again become available for subsequent issuance under the 2015 Plan.

## [Table of Contents](#)

After the effective date of the 2018 Plan, no additional stock awards will be granted under the 2015 Plan, and all outstanding stock awards granted under the 2015 Plan that are repurchased, forfeited, expire or are cancelled will become available for grant under the 2018 Plan in accordance with its terms.

*Administration.* Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2015 Plan. Subject to the terms of the 2015 Plan, our board of directors or the authorized committee, referred to herein as the plan administrator, has the authority, in its discretion, to determine recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability, the forms of award agreements and vesting schedule applicable to a stock award. The plan administrator has the authority to construe and interpret the terms of the 2015 Plan and stock awards granted under the 2015 Plan. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of stock awards granted and the types of consideration to be paid for the stock award.

The plan administrator has the authority to modify or amend outstanding stock awards under our 2015 Plan. Subject to the terms of our 2015 Plan, the plan administrator has the authority to institute and determine the terms and conditions of any stock award exchange program, which may include, the surrender or cancellation of outstanding stock awards in exchange for new stock awards and/or cash, the opportunity to transfer outstanding stock awards to a financial institution or other person or entity selected by the plan administrator or the reduction or increase of the exercise price of outstanding stock awards.

*Stock Options.* ISOs and NSOs are granted pursuant to stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2015 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2015 Plan may either be time- or performance-based options, which vest at the rate specified by the plan administrator. The plan administrator determines the term of stock options granted under the 2015 Plan, up to a maximum of 10 years.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to the number and class of shares that may be delivered under the 2015 Plan, and/or the number, class and price of shares covered by each outstanding stock award.

*Merger or Change in Control.* In the event of a merger or certain specified change in control transactions, each outstanding stock award will be treated as the plan administrator determines without a participant's consent, including providing that:

- stock awards will be assumed, or substantially equivalent stock awards will be substituted, by the acquiring or succeeding entity with appropriate adjustments as to the number and kind of shares and prices;
- upon written notice to the participant, that the participant's stock awards will terminate upon or immediately prior to the consummation of the merger or change in control;
- outstanding stock awards will vest and become exercisable or payable, or restrictions applicable to the stock awards will lapse, in whole or in part, prior to or upon consummation of the merger or change in control, and to the extent determined by the plan administrator, the stock awards will terminate upon or immediately prior to the merger or change in control;
- the termination of a stock award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of the stock award or realization of the participant's rights with respect to the stock award as of the date of the occurrence of the transaction (including termination for no payment if no amount would have been attained upon exercise of the stock award or realization of the participant's rights with respect to the stock award), or the replacement of the stock award with other rights or property selected by the plan administrator in its sole discretion; or
- any combination of the foregoing.

Our plan administrator is not obligated to treat all stock awards, all stock awards held by a participant or all stock awards of the same type, in the same manner.



In addition, if the successor entity does not assume or substitute for the stock awards or a portion thereof, the participant will fully vest in and have the right to exercise all of his or her outstanding stock awards and all restrictions on outstanding stock awards will lapse, and, with respect to stock options and stock appreciation rights, the plan administrator will notify the participant that the stock options and stock appreciation rights will be exercisable for a period of time as determined by the plan administrator, and will terminate upon the expiration of that period if not exercised. For this purpose, a stock award will be considered assumed if, following the merger or change in control, the stock award provides the right to purchase or receive, for each share subject to the stock award immediately before the merger or change in control, the consideration (including cash, stock or other securities or property) received in the merger or change in control by holders of our common stock generally. If the consideration to be received by the holders of our common stock is not solely common stock of the successor entity or its parent, however, the plan administrator may, with the consent of the successor entity, provide for the consideration to be received upon the exercise or payout of a stock award to be solely common stock of the successor entity or its parent equal in fair market value to the per share consideration received by holders of our common stock in the merger or change in control.

Under the 2015 Plan, a change in control is generally the occurrence of (i) a change in the ownership of the company that occurs on the date that any one person, or more than one person acting as a group, acquires stock of the company that, together with the stock held by the person or group, constitutes more than 50% of the total voting power of our stock, but excluding any change in the ownership of our stock as a result of a private financing that is approved by our board of directors; (ii) a change in effective control of the company that occurs on the date that a majority of the members of our board of directors is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of our board of directors prior to the date of the appointment or election, provided that if any individual or group is already in effective control of the company, the acquisition of additional control by the same individual or group will not be considered a change in control; or (iii) a change in the ownership of a substantial portion of our assets which occurs on the date that any individual or group acquires (or has acquired during the previous twelve month period ending on the date of the most recent acquisition) assets of the company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the company's assets immediately before the acquisition or acquisitions.

*Transferability.* A participant generally may not transfer stock awards under our 2015 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2015 Plan.

*Amendment and Termination.* The 2015 Plan will terminate on June 19, 2027. However, our board of directors has the authority to amend, suspend or terminate our 2015 Plan, provided that such action does not impair the existing rights of any participant without such participant's written consent.

#### **2018 Employee Stock Purchase Plan**

Our board of directors adopted the ESPP in June 2018, and our stockholders approved the ESPP in . The ESPP will become effective upon completion of this offering. The purpose of the ESPP is to secure the services of new employees, to retain the services of existing employees and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code.

*Share Reserve.* Following this offering, the ESPP will authorize the issuance of 200,000 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2019 (assuming the ESPP becomes effective in 2018) through January 1, 2028, by the lesser of (i) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, and (ii) 375,000 shares; provided, that prior to the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (i) and (ii).

*Administration.* Our board of directors intends to delegate concurrent authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common

stock will be purchased for employees participating in the offering. An offering under the ESPP may be terminated under certain circumstances.

*Payroll Deductions.* Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share equal to the lower of (i) 85% of the fair market value of a share of our common stock on the first trading date of an offering or (ii) 85% of the fair market value of a share of our common stock on the date of purchase.

*Limitations.* Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors, including: (i) being customarily employed for more than 20 hours per week; (ii) being customarily employed for more than five months per calendar year; or (iii) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

*Changes to Capital Structure.* In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (i) the number of shares reserved under the ESPP, (ii) the maximum number of shares by which the share reserve may increase automatically each year, (iii) the number of shares and purchase price of all outstanding purchase rights and (iv) the number of shares that are subject to purchase limits under ongoing offerings.

*Corporate Transactions.* In the event of certain significant corporate transactions, including (i) a sale of all or substantially all of our assets, (ii) the sale or disposition of 50% of our outstanding securities, (iii) the consummation of a merger or consolidation where we do not survive the transactions and (iv) the consummation of a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days prior to such corporate transaction, and such purchase rights will terminate immediately.

*ESPP Amendments, Termination.* Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP, as required by applicable law or listing requirements.

### **Non-Employee Director Compensation**

We have not historically had a formal compensation policy with respect to service on our board of directors, but we have reimbursed our non-employee directors for direct expenses incurred in connection with attending meetings of our board of directors or its committees, and occasionally granted stock options. In March 2018, our board of directors approved a non-employee director compensation policy that will be effective upon the effectiveness of the registration statement of which this prospectus is a part. Under this policy, we will pay each of our non-employee directors a cash retainer for service on the board of directors and for service on each committee on which the director is a member. The chairperson of each committee will receive a higher retainer for such service. These retainers are payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment will be prorated for any portion of such quarter that the director is not serving on our board

## Table of Contents

of directors or the applicable committee. No retainers will be paid in respect of any period prior to the completion of this offering. The retainers to be paid to non-employee directors for service on the board of directors and for service on each committee of the board of directors on which the director is a member are as follows:

POSITION	ANNUAL SERVICE RETAINER	CHAIRPERSON ADDITIONAL RETAINER
Board of directors	\$ 35,000	\$ 30,000
Audit committee	7,500	7,500
Compensation committee	5,000	5,000
Nominating and corporate governance committee	4,000	4,000

In addition, under our non-employee director compensation policy to be effective upon the effectiveness of the registration statement of which this prospectus is a part, each non-employee director elected to our board of directors after the completion of this offering will receive an option to purchase 17,793 shares of our common stock. The shares subject to each such stock option will vest monthly over a three-year period, subject to the director's continued service as a director. Further, on the date of each annual meeting of stockholders held after the completion of this offering, each non-employee director that continues to serve as a non-employee member on our board of directors will receive an option to purchase 8,896 shares of our common stock. The shares subject to each such stock option will vest in full on the date that is 12 months after the grant date, subject to the director's continued service as a director. The exercise price of these options will equal the fair market value of our common stock on the date of grant.

This policy is intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors' interests with those of our stockholders.

### 2017 Director Compensation Table

The following table sets forth information regarding the compensation earned for service on our board of directors by our non-employee directors and for their service as a consultant to us, if applicable, during the year ended December 31, 2017. Mr. Fowler and Dr. Kirk also served on our board of directors, but did not receive any additional compensation for their service as a director and therefore are not included in the table below. The compensation for Mr. Fowler and Dr. Kirk as a named executive officer is set forth above under "—Summary Compensation Table."

NAME	STOCK AWARDS <sup>(8)</sup> (\$)	OPTION AWARDS <sup>(1)(3)(8)</sup> (\$)	ALL OTHER COMPENSATION (\$)	TOTAL (\$)
Jean-Pierre Sommadossi, Ph.D.	—	26,415 (2)	—	26,415
Gerald Chan, D.Sc.(7)	—	—	—	—
Franklin M. Berger, CFA	—	26,415 (2)	—	26,415
Michael Kauffman, M.D., Ph.D.	—	63,771 (4)	27,000 (6)	90,771
Bihua Chen	—	—	—	—
Graham Cooper	—	62,782 (5)	—	62,782

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during fiscal year 2017 computed in accordance with ASC 718. Assumptions used in the calculation of these amounts are included in the notes to our audited consolidated financial statements included elsewhere in this prospectus. These amounts do not reflect the actual economic value that will be realized by our non-employee directors upon the vesting of the stock options, the exercise of the stock options or the sale of the common stock underlying such stock options.

(2) Represents an option to purchase 15,747 shares of our common stock granted in October 2017 at an exercise price of \$2.37 per share.

(3) 25% of the shares underlying each option vest on the one-year anniversary of the vesting commencement date and the remainder vest in 36 equal monthly installments thereafter on the last day of each month.

(4) Represents (i) an option to purchase 37,427 shares of our common stock granted in January 2017 at an exercise price of \$1.41 per share and (ii) an option to purchase 15,747 shares of our common stock granted in October 2017 at an exercise price of \$2.37 per share.

## [Table of Contents](#)

- (5) Represents an option to purchase 37,427 shares of our common stock granted in October 2017 at an exercise price of \$2.37 per share.
- (6) Consists of consulting fees earned by Dr. Kauffman in 2017. See "Certain Relationships and Related Party Transactions—Consulting Agreement with Michael Kauffman" for additional information.
- (7) Gerald Chan resigned from our board of directors in April 2018.
- (8) The following table provides information regarding the number of shares of restricted stock and shares of common stock underlying stock options granted to our non-employee directors that were outstanding as of December 31, 2017:

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NAME	RESTRICTED STOCK OUTSTANDING AT YEAR-END (1)	OPTION AWARDS OUTSTANDING AT YEAR-END
Jean-Pierre Sommadossi, Ph.D.	26,511	15,747
Gerald Chan, D.Sc.(2)	—	37,427
Franklin M. Berger, CFA	18,713	15,747
Michael Kauffman, M.D., Ph.D.	—	53,174
Bihua Chen	—	—
Graham Cooper	—	37,427

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- (1) These shares were acquired through the early exercise of stock options granted and are subject to repurchase by us at the cost paid for the shares if such director's service terminates before vesting.
- (2) Gerald Chan resigned from our board of directors in April 2018.

### **Rule 10b5-1 Sales Plans**

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell our common shares on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan at any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering, subject to early termination, the sale of any shares under such plan would be prohibited by the lock-up agreement that the director or officer has entered into with the underwriters.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since February 19, 2015 (date of inception) and any currently proposed transactions, to which we were or are to be a participant, in which (1) the amount involved exceeded or will exceed \$120,000, and (2) any of our directors, executive officers or holders of more than 5% of our capital stock, or any affiliate or member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest, other than compensation and other arrangements that are described under the section titled "Executive and Director Compensation."

We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that we would pay or receive, as applicable, in arm's-length transactions.

### Redeemable Convertible Preferred Stock Financings

#### *Series A Redeemable Convertible Preferred Stock Financing*

In June 2015, we issued an aggregate of 5,966,754 shares of our Series A redeemable convertible preferred stock at a price per share of \$4.755 in two closings. The first closing occurred on June 11, 2015, at which time we issued 5,837,930 shares of our Series A redeemable convertible preferred stock for (i) gross cash proceeds of \$22.4 million and (ii) Onyx Therapeutics, Inc., or Onyx, entry into the Exclusive License Agreement, dated as of June 11, 2015, by and between us and Onyx, or the Onyx license agreement. The second closing occurred on June 15, 2015, at which time we issued an additional 128,824 shares of our Series A redeemable convertible preferred stock for gross cash proceeds of \$0.6 million.

The table below sets forth the number of shares of our Series A redeemable convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members. All such individuals and entities participated in the first closing on June 11, 2015. Each share of Series A redeemable convertible preferred stock in the table below will automatically convert into one share of our common stock upon the completion of this offering.

NAME	SERIES A REDEEMABLE CONVERTIBLE PREFERRED STOCK (#)	AGGREGATE CASH PURCHASE PRICE (\$)
Onyx Therapeutics, Inc.	1,121,384	— <sup>(1)</sup>
Morningside Venture Investments Limited (2)	1,051,630	5,000,000
Entities affiliated with EcoR1 Capital	420,652	1,999,999
Entities affiliated with Cormorant Asset Management (3)	315,489	1,499,999
Franklin M. Berger, CFA (4)	262,907	1,250,000
JPM Partners, LLC (5)	52,581	250,000
Jean-Pierre Sommadossi 1998 Irrevocable Trust (6)	52,581	250,000
Brien Kirk (7)	36,813	175,030

(1) Consideration paid by way of Onyx's entry into the Onyx license agreement, described below.

(2) Gerald Chan, a former member of our board of directors, and Jason R. Dinges, a current member of our board of directors, were designated to our board by Morningside Venture Investments Limited.

(3) Bihua Chen, a member of our board of directors, is a managing member at Cormorant Asset Management.

(4) Franklin Berger is a member of our board of directors.

(5) JPM Partners, LLC is a limited liability company solely managed by Dr. Jean-Pierre Sommadossi, a member of our board of directors.

(6) The beneficiary of the Jean-Pierre Sommadossi 1998 Irrevocable Trust is the daughter of Dr. Jean-Pierre Sommadossi, a member of our board of directors.

(7) Brien Kirk is the brother of Dr. Christopher Kirk, our president, chief scientific officer and member of our board of directors.

#### **Onyx License Agreement**

On June 11, 2015, we entered into the Onyx license agreement with Onyx, a holder of more than 5% of our capital stock, whereby, among other things, Onyx granted to us an exclusive license under certain patents, and a

## [Table of Contents](#)

non-exclusive license to certain know-how, in each case controlled by Onyx and relating to our immunoproteasome program. In consideration of Onyx's execution and delivery of the Onyx license agreement, Onyx was issued 1,121,384 shares of our Series A redeemable convertible preferred stock, the approximate dollar value of which was \$5.3 million. See the section titled "Business—License Agreement with Onyx" for more information on the Onyx license agreement.

### **Series B Redeemable Convertible Preferred Stock Financing**

In June and July 2017, we issued an aggregate of 6,296,373 shares of our Series B redeemable convertible preferred stock at a price per share of \$7.942 in two closings. The first closing occurred on June 26, 2017, at which time we issued 5,367,661 shares of our Series B redeemable convertible preferred stock for gross cash proceeds of \$42.6 million. The second closing occurred on July 21, 2017, at which time we issued an additional 928,712 shares of our Series B redeemable convertible preferred stock for gross cash proceeds of \$7.4 million.

The table below sets forth the number of shares of Series B redeemable convertible preferred stock purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members. Each share of Series B redeemable convertible preferred stock in the table below will automatically convert into one share of our common stock upon the completion of this offering.

<b>NAME</b>	<b>SERIES B REDEEMABLE CONVERTIBLE PREFERRED STOCK (#)</b>	<b>AGGREGATE CASH PURCHASE PRICE (\$)</b>
Entities affiliated with Cormorant Asset Management (1)	1,007,421	7,999,999
Cowen Healthcare Investments II LP	1,007,422	7,999,999
Morningside Venture Investments Limited (2)	1,007,422	7,999,999
Omega Fund IV, L.P.	377,783	3,000,000
Entities affiliated with EcoR1 Capital	314,816	2,499,998
Franklin M. Berger, CPA (3)	197,076	1,564,999
Jean-Pierre Sommadossi 1998 Irrevocable Trust (4)	35,259	280,001
JPM Partners, LLC (5)	35,258	279,999

(1) Bihua Chen, a member of our board of directors, is a managing member at Cormorant Asset Management.

(2) Gerald Chan, a former member of our board of directors, and Jason R. Dinges, a current member of our board of directors, were designated to our board by Morningside Venture Investments Limited.

(3) Franklin Berger is a member of our board of directors.

(4) The beneficiary of the Jean-Pierre Sommadossi 1998 Irrevocable Trust is the daughter of Dr. Jean-Pierre Sommadossi, a member of our board of directors.

(5) JPM Partners, LLC is a limited liability company solely managed by Dr. Jean-Pierre Sommadossi, a member of our board of directors.

### **Consulting Agreement with Michael Kauffman**

On April 1, 2017, we entered into a consulting agreement with Michael Kauffman, a member of our board of directors. This agreement provides that Dr. Kauffman shall provide clinical and scientific advisory services and participate on our board of directors in exchange for a monthly fee of \$3,000, payable on the first of the month. The consulting agreement will terminate upon the effectiveness of the registration statement of which this prospectus is a part.

### **Investors' Rights Agreement**

We are party to an amended and restated investors' rights agreement, dated June 26, 2017, with the holders of our redeemable convertible preferred stock and certain holders of our common stock, including all holders of more than 5% of our capital stock, Franklin M. Berger, JPM Partners, LLC, Jean-Pierre Sommadossi 1998 Irrevocable Trust and Brien Kirk. This agreement provides that these holders are entitled to certain registration rights, including the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we otherwise file. In addition to the registration rights, this agreement provides for certain information rights and rights of first offer in favor of certain holders of our redeemable convertible preferred stock with regard to certain issuances of our capital stock. The information rights and rights of first offer will terminate immediately prior to the completion of this offering. The registration rights will terminate upon the earliest of (i) the closing of a

## [Table of Contents](#)

deemed liquidation event, as defined in our amended and restated certificate of incorporation, as currently in effect, (ii) with respect to each stockholder, the date when such stockholder can sell all of its registrable shares without limitation during a three-month period without registration pursuant to Rule 144 of the Securities Act or another similar exemption under the Securities Act and (iii) five years after the completion this offering. For a description of the registration rights, see the section titled “Description of Capital Stock—Registration Rights.”

### **Other Transactions**

We have entered into various employment-related agreements with our executive officers that, among other things, provide for compensatory and certain change in control benefits. For a description of these agreements and arrangements, see the section titled “Executive and Director Compensation—Employment Arrangements.”

We have also granted stock options to our executive officers and directors. For a description of these stock options, see the section titled “Executive and Director Compensation.”

### **Indemnification Agreements**

We have entered or intend to enter, and intend to continue to enter, into separate indemnification agreements with some of our directors and executive officers, in addition to the indemnification provided for in our bylaws. These indemnification agreements provide our directors and executive officers with contractual rights to indemnification and, in some cases, expense advancement in any action or proceeding arising out of their services as one of our directors or executive officers or as a director or executive officer of any other company or enterprise to which the person provides services at our request. For more information regarding these indemnification agreements, see “Management—Limitations on Liability and Indemnification Matters.”

### **Related Party Transaction Policy**

In connection with this offering, we intend to adopt a written related party transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related party transactions. This policy will become effective upon the effectiveness of the registration statement of which this prospectus is a part. For purposes of this policy only, a “related person transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any related person are participants involving an amount that exceeds \$120,000. Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A “related person” is any executive officer, director, nominee to become a director or a holder of more than 5% of our capital stock, or any affiliate or member of the immediate family of the foregoing.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our audit committee or, where review by our audit committee would be inappropriate due to a conflict of interest, to another independent body of our board of directors, for review. The presentation must include a description of, among other things, all of the parties, the direct and indirect interests of the related persons, the purpose of the transaction, the material facts, the benefits of the transaction to us and whether any alternative transactions are available, an assessment of whether the terms are comparable to the terms available from unrelated third parties and management’s recommendation. To identify related-person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related-person transactions, our audit committee or another independent body of our board of directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director’s independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties under the same or similar circumstances.

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[Table of Contents](#)

All of the transactions described in this section were entered into prior to the adoption of this policy. Although we have not had a written policy for the review and approval of transactions with related persons, our board of directors has historically reviewed and approved any transaction where a director or officer had a financial interest, including the transactions described above. Prior to approving such a transaction, the material facts as to a director's or officer's relationship or interest in the agreement or transaction were disclosed to our board of directors. Our board of directors took this information into account when evaluating the transaction and in determining whether such transaction was fair to us and in the best interest of all our stockholders.



## PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our capital stock as of June 1, 2018 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

The percentage ownership information under the column titled "Before Offering" is based on 13,348,032 shares of common stock outstanding as of June 1, 2018, assuming the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into an aggregate of 12,263,126 shares of common stock upon the completion of this offering. The percentage ownership information under the column titled "After Offering" is based on the sale of 4,666,667 shares of common stock in this offering (assuming an initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus). The percentage ownership information assumes no exercise of the underwriters' option to purchase additional shares to cover over-allotments and no purchases of any shares of common stock in this offering by the beneficial owners identified in the table below.

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 include shares of our common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable within 60 days of June 1, 2018. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

## Table of Contents

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Kezar Life Sciences, Inc., 4000 Shoreline Court, Suite 300, South San Francisco, California 94080.

	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
<b>Greater than 5% Stockholders:</b>			
Morningside Venture Investments Limited (1)	2,059,052	15.4%	11.4%
Cormorant Asset Management (2)	1,322,909	9.9%	7.3%
Onyx Therapeutics, Inc. (3)	1,121,384	8.4%	6.2%
Cowen Healthcare Investments II LP (4)	1,007,422	7.5%	5.6%
EcoR1 Capital (5)	735,468	5.5%	4.1%
Omega Fund IV, L.P. (6)	693,272	5.2%	3.8%
<b>Directors and Named Executive Officers:</b>			
Franklin M. Berger, CFA (7)	522,053	3.9%	2.9%
Jason R. Dinges, Ph.D., J.D. (8)	—	*	*
Bihua Chen (9)	1,322,909	9.9%	7.3%
Graham Cooper (10)	46,323	*	*
John Fowler (11)	504,205	3.7%	2.8%
Michael Kauffman, M.D., Ph.D. (12)	72,586	*	*
Christopher Kirk, Ph.D. (13)	501,796	3.7%	2.8%
Jean-Pierre Sommadossi, Ph.D. (14)	187,336	1.4%	1.0%
<b>All current executive officers and directors as a group (10 persons)</b>	<b>3,157,208</b>	<b>22.8%</b>	<b>17.1%</b>

\* Represents beneficial ownership of less than 1%.

- (1) Louise Mary Garbarino, Jill Marie Franklin, Peter Stuart Allenby Edwards and Raymond Long Sing Tang, the directors of Morningside Venture Investments Limited, or MVIL, share voting and dispositive control over the shares held by Morningside. The address for MVIL is 2nd Floor, Le Prince de Galles, 3-5 Avenue des Citronniers, MC 98000, Monaco.
- (2) Includes (i) 435,751 shares held by Cormorant Global Healthcare Master Fund, LP, or Cormorant Master Fund, (ii) 803,116 shares held by Cormorant Private Healthcare Fund I, LP, or Cormorant Private Fund, and (iii) 84,042 shares held by CRMA SPV, L.P., or CRMA. The sole general partner of Cormorant Master Fund is Cormorant Global Healthcare GP, LLC and the sole general partner of Cormorant Private Fund is Cormorant Private Healthcare GP, LLC, or the Cormorant GP. Bihua Chen is the sole managing member of the Cormorant GP, and may be deemed to have sole voting and investment power of the securities held by the Cormorant Private Fund and the Cormorant Master Fund. The sole investment manager of CRMA is Cormorant Asset Management, LLC, or the Manager. Bihua Chen is the sole managing member of the Manager, and may be deemed to have sole voting and investment power of the securities held by CRMA. The address of the Cormorant Private Fund, the Cormorant Master Fund and CRMA is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (3) Represent shares held directly by Onyx Therapeutics, Inc., or Onyx, an indirect wholly owned subsidiary of Amgen Inc., or Amgen. Onyx and Amgen share voting and investment power of the securities held by Onyx. The address for Onyx Therapeutics, Inc. is c/o Amgen Inc., One Amgen Center Drive, Thousand Oaks, California 91320.
- (4) Cowen Healthcare Investments II GP, LLC is the sole general partner of Cowen Healthcare Investments II, LP, or Cowen II. As managing partner of Cowen II, Kevin J. Raidy exercises sole voting and investment power of the securities held by Cowen II. Mr. Raidy disclaims beneficial ownership of the shares held by Cowen II, except to the extent of any actual pecuniary interest. The address for Cowen II is 599 Lexington Avenue, New York, New York 10022.
- (5) Includes (i) 204,446 shares held by EcoR1 Capital Fund, L.P. and (ii) 531,022 shares held by EcoR1 Capital Fund Qualified, L.P. Oleg Nodelman is the control person for EcoR1 Capital, LLC, the sole general partner of EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P., and may be deemed to beneficially own the shares held of record by EcoR1 Capital Fund, L.P. and EcoR1 Capital Fund Qualified, L.P. EcoR1 Capital, LLC has an address at 409 Illinois Street, San Francisco, California 94158.
- (6) Omega Fund IV GP, L.P., or Omega IV GP LP, is the general partner of Omega Fund IV, L.P. Omega Fund IV G.P. Manager, Ltd., or Omega IV GP Manager, is the general partner of Omega IV GP LP. Otello Stampacchia, Richard Lim and Anne-Mari Paster are all the shareholders and directors of Omega IV GP Manager and have shared voting and investment power over the shares held by Omega Fund IV, L.P. The address for Omega Fund IV, L.P. is 185 Dartmouth Street, Suite 502, Boston, Massachusetts 02116.
- (7) Includes (i) 513,357 shares held directly by Franklin Berger and (ii) 8,896 shares of common stock issuable within 60 days of June 1, 2018.
- (8) Dr. Dinges disclaims beneficial ownership of shares held by MVIL.
- (9) Includes (i) 435,751 shares held by Cormorant Master Fund, (ii) 803,116 shares held by Cormorant Private Fund and (iii) 84,042 shares held by CRMA. The sole general partner of each of the Cormorant Private Fund and the Cormorant Master Fund is the Cormorant GP. Ms. Chen is the sole managing member of the GP, and may be deemed to have sole voting and investment

## [Table of Contents](#)

power of the securities held by the Cormorant Private Fund and the Cormorant Master Fund. The sole investment manager of CRMA is Cormorant Asset Management, LLC, or the Manager. Bihua Chen is the sole managing member of the Manager, and may be deemed to have sole voting and investment power of the securities held by CRMA.

- (10) Includes solely 46,323 shares of common stock issuable upon the exercise of stock options within 60 days of June 1, 2018.
- (11) Includes (i) 292,704 shares held directly by John Fowler and (ii) 211,501 shares of common stock issuable upon the exercise of stock options within 60 days of June 1, 2018.
- (12) Includes (i) 63,690 shares held directly by Michael Kauffman and (ii) 8,896 shares of common stock issuable upon the exercise of stock options within 60 days of June 1, 2018.
- (13) Includes (i) 292,704 shares held directly by Christopher Kirk and (ii) 209,092 shares of common stock issuable upon the exercise of stock options within 60 days of June 1, 2018.
- (14) Includes (i) 178,440 shares held by JPM Partners, LLC, a limited liability company solely managed by Dr. Sommadossi and (ii) 8,896 shares of common stock issuable upon the exercise of stock options within 60 days of June 1, 2018.

## DESCRIPTION OF CAPITAL STOCK

*The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries. You should also refer to the amended and restated certificate of incorporation, the amended and restated bylaws and the amended and restated investors' rights agreement, which are filed as exhibits to the registration statement of which this prospectus is a part.*

### General

Upon the completion of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 125,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

### Common Stock

#### **Outstanding Shares**

As of March 31, 2018, we had 13,321,522 shares of common stock outstanding, held of record by 69 stockholders, assuming the automatic conversion of all outstanding shares of our redeemable convertible preferred stock into 12,263,126 shares of common stock upon the completion of this offering.

#### **Voting Rights**

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders. The affirmative vote of holders of at least 66 2/3% of the voting power of all of the then-outstanding shares of capital stock, voting as a single class, will be required to amend certain provisions of our amended and restated certificate of incorporation, including provisions relating to amending our amended and restated bylaws, the classified board, the size of our board, removal of directors, director liability, vacancies on our board, special meetings, stockholder notices, actions by written consent and exclusive jurisdiction.

#### **Dividends**

Subject to preferences that may apply to any outstanding preferred stock, holders of our common stock are entitled to receive ratably any dividends that our board of directors may declare out of funds legally available for that purpose on a non-cumulative basis.

#### **Liquidation**

In the event of our liquidation, dissolution or winding up, 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, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

#### **Rights and Preferences**

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

### Preferred Stock

Upon the completion of this offering, all outstanding shares of redeemable convertible preferred stock will convert into shares of our common stock on a one-to-one basis. As of March 31, 2018, we had 12,263,126 shares of preferred stock outstanding, held of record by 61 stockholders. Immediately after the completion of this offering, our certificate of incorporation will be amended and restated to delete all references to such shares of preferred stock. Under the amended and restated certificate of incorporation, 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, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

## [Table of Contents](#)

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

### **Stock Options**

As of March 31, 2018, 1,354,965 shares of common stock were issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of \$1.68 per share (which excludes 784,507 shares of our common stock issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2018 at an exercise price of \$5.91 per share). For additional information regarding terms of our equity incentive plans, see the section titled “Executive and Director Compensation—Equity Incentive Plans.”

### **Registration Rights**

Upon the completion of this offering, certain holders of shares of our common stock, including those shares of our common stock that will be issued upon the conversion of our preferred stock in connection with this offering, will initially be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of our amended and restated investors’ rights agreement and are described in additional detail below. The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will expire no later than five years after the completion of this offering, or with respect to any particular holder, at such time that such holder can sell its shares under Rule 144 of the Securities Act during any three-month period.

#### ***Demand Registration Rights***

Upon the completion of this offering, holders of 12,263,126 shares of our common stock issuable upon conversion of outstanding preferred stock, will be entitled to certain demand registration rights. At any time beginning on the earlier of the fifth anniversary of the date of our amended and restated investors’ rights agreement or 180 days following the effectiveness of this registration statement, the holders of a majority of registrable securities may, on not more than one occasion, request that we register all or a portion of their shares, subject to certain specified exceptions.

#### ***Piggyback Registration Rights***

In connection with this offering, holders of 12,263,126 shares of our common stock issuable upon conversion of outstanding preferred stock are entitled to, which we expect the necessary percentage of holders to waive, their rights to notice of this offering and to include their shares of registrable securities in this offering. In the event that we propose to register any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of registrable securities will be entitled to certain “piggyback” registration rights allowing them to include their shares in such registration, subject to specified conditions and limitations.

#### ***S-3 Registration Rights***

Upon the completion of this offering, the holders of 12,263,126 shares of our common stock issuable upon conversion of outstanding preferred stock will initially be entitled to certain Form S-3 registration rights. The holders of at least 30% of registrable securities may, on not more than two registrations on Form S-3 within any 12-month period, request that we register all or a portion of their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to specified exceptions. Such request for registration on Form S-3 must cover

securities with an aggregate offering price which equals or exceeds \$5.0 million, net of selling expenses. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

## **Anti-Takeover Provisions of Delaware Law and Our Charter Documents**

### ***Section 203 of the Delaware General Corporation Law***

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- 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 by or through the corporation.

In general, Section 203 defines an "interested stockholder" as an 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.

The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

### ***Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws***

Among other things, our amended and restated certificate of incorporation and amended and restated 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 control;
- provide that the authorized number of directors may be changed only by resolution of our board of directors;
- provide that our board of directors will be classified into three classes of directors;
- provide that, subject to the rights of any series of preferred stock to elect directors, directors may only be removed for cause, which removal may be effected, subject to any limitation imposed by law, by the holders of at least a majority of the voting power of all of our then-outstanding shares of the capital stock entitled to vote generally at an election of directors;

## Table of Contents

- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent or electronic transmission;
- 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 advance notice in writing, and also specify requirements as to the form and content of a stockholder's notice;
- provide that special meetings of our stockholders may be called only by the chairman of our board of directors, our chief executive officer or president or by our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors; and
- not provide for cumulative voting rights, therefore allowing the holders of a majority 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.

The amendment of any of these provisions would require approval by the holders of at least 66 2/3% of the voting power of all of our then-outstanding common stock entitled to vote generally in the election of directors, voting together as a single class.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Because our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

### **Choice of Forum**

Our amended and restated certificate of incorporation will 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 breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Our amended and restated certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could find the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable.

### **Listing**

We have applied to list our common stock on The Nasdaq Global Market under the trading symbol "KZR."

### **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.



## SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of our common stock, including shares issued upon the exercise of outstanding options, in the public market after the completion of this offering, or the perception that those sales may occur, could adversely affect the prevailing market price for our common stock from time to time or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after the completion of this offering due to contractual and legal restrictions on resale described below. Future sales of our common stock in the public market either before or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

### Sale of Restricted Shares

Based on the number of shares of our common stock outstanding as of March 31, 2018, upon the closing of this offering and assuming (i) the automatic conversion of our outstanding redeemable convertible preferred stock into common stock into an aggregate of 12,263,126 shares of our common stock upon the completion of this offering, (ii) no exercise of the underwriters' option to purchase additional shares of common stock to cover over-allotments, if any, and (iii) no exercise of outstanding options, we will have outstanding an aggregate of approximately shares of common stock. Of these shares, all of the 4,666,667 shares of common stock to be sold in this offering will be freely tradable in the public market without restriction or further registration under the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act, or Rule 144 or subject to lock-up agreements. All remaining shares of common stock held by existing stockholders immediately prior to the consummation of this offering will be "restricted securities," as such term is defined in Rule 144. These restricted securities were issued and sold by us in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701 of the Securities Act, or Rule 701, which rules are summarized below.

As a result of the lock-up agreements referred to below and the provisions of Rule 144 and Rule 701 under the Securities Act, based on the number of shares of our common stock outstanding as of March 31, 2018, the shares of our common stock (excluding the shares sold in this offering) that will be available for sale in the public market are as follows:

<u>APPROXIMATE NUMBER OF SHARES</u>	<u>FIRST DATE AVAILABLE FOR SALE INTO PUBLIC MARKET</u>
13,321,522 shares	181 days after the date of this prospectus, upon expiration of the lock-up agreements referred to below, subject in some cases to applicable volume, manner of sale and other limitations under Rule 144 and Rule 701.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event that any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may in turn be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition and investment.

In addition, the shares of common stock reserved for future issuance under our 2018 Plan will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, a registration statement under the Securities Act or an exemption from registration, including Rule 144 and Rule 701.

### Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of the company who owns shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144.

## [Table of Contents](#)

Under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, and we are current in our Exchange Act reporting at the time of sale, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the 90 days preceding a sale and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to below, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable).

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months, are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of common shares then outstanding, which will equal approximately 179,881 shares of common stock immediately upon the completion of this offering (calculated as of March 31, 2018 on the basis of the assumptions described above and assuming no exercise of the underwriter's option to purchase additional shares to cover over-allotments, if any, and no exercise of outstanding options); or
- the average weekly trading volume of our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

### **Rule 701**

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 before the effective date of the registration statement of which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) and who are not our "affiliates" as defined in Rule 144 during the immediately preceding 90 days, is entitled to rely on Rule 701 to resell such shares beginning 90 days after the date of this prospectus in reliance on Rule 144, but without complying with the notice, manner of sale, public information requirements or volume limitation provisions of Rule 144. Persons who are our "affiliates" may resell those shares beginning 90 days after the date of this prospectus without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to below, if applicable).

### **Lock-Up Agreements**

In connection with this offering, we, our directors, our executive officers and holders of all of our other outstanding shares of common stock or securities convertible into or exchangeable for shares of our common stock outstanding upon the completion of this offering, have agreed, subject to certain exceptions, with the underwriters not to directly or indirectly offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of or hedge any shares of our common stock or any options to purchase shares of our common stock, or any securities convertible into or exchangeable for shares of common stock during the period from the date of the lock-up agreement continuing through the date 180 days after the date of this prospectus, except with the prior

## [Table of Contents](#)

written consent of Jefferies LLC and Cowen and Company, LLC, and certain other exceptions. These agreements are described in the section titled "Underwriting."

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain security holders, including the amended and restated investors' rights agreement and our standard form of option agreement, that contain market stand-off provisions imposing restrictions on the ability of such security holders to offer, sell or transfer our equity securities for a period of 180 days following the date of this prospectus.

Prior to the completion of the offering, certain of our employees, including our executive officers, and/or directors, may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Following the lock-up periods set forth in the agreements described above, and assuming that the representatives of the underwriters do not release any parties from these agreements and that there is no extension of the lock-up period, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144.

### **Registration Rights**

Upon the completion of this offering, the holders of 12,263,126 shares of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the lock-up agreements described under "—Lock-Up Agreements" above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of the registration statement of which this prospectus is a part. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. See the section titled "Description of Capital Stock—Registration Rights."

### **Equity Incentive Plans**

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under our 2018 Plan. The registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under the registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

## MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies and other financial institutions;
- brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies" and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and
- tax-qualified retirement plans.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

**THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY. IN ADDITION, SIGNIFICANT CHANGES IN U.S. FEDERAL INCOME TAX LAWS WERE RECENTLY ENACTED. INVESTORS SHOULD ALSO CONSULT WITH THEIR TAX ADVISORS WITH RESPECT TO SUCH CHANGES IN U.S. TAX LAW AS WELL AS POTENTIAL CONFORMING CHANGES IN STATE TAX LAWS.**

### **Definition of a Non-U.S. Holder**

For purposes of this discussion, a “Non-U.S. Holder” is any beneficial owner of our common stock that is neither a “U.S. person” nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or entity treated as a corporation that is created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a U.S. court and the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code), or (ii) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

### **Distributions**

As described in the section titled “Dividend Policy,” we do not currently intend to pay any cash dividends on our capital stock in the foreseeable future. However, if we make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder’s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under “—Sale or Other Taxable Disposition.”

Subject to the discussions below on effectively connected income, backup withholding and FATCA, dividends paid to a Non-U.S. Holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment or fixed base in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

### **Sale or Other Taxable Disposition**

Subject to the discussions below regarding backup withholding and FATCA, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment or fixed base in the United States to which such gain is attributable);

## [Table of Contents](#)

- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period. If we are a USRPHC and either our common stock is not regularly traded on an established securities market or a Non-U.S. Holder holds more than 5% of our common stock, actually or constructively, during the applicable testing period, such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

### **Information Reporting and Backup Withholding**

Payments of dividends on our common stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

### **Additional Withholding Tax on Payments Made to Foreign Accounts**

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a “foreign financial institution” or a “non-financial foreign entity” (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any “substantial United States owners” (as defined in the Code) or furnishes identifying information regarding each substantial United States owner or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain “specified United States persons” or “United States-owned foreign entities” (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies currently to payments of dividends on our common stock, and, beginning on January 1, 2019, will apply to payments of gross proceeds from the sale or other disposition of such stock.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.



## UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated \_\_\_\_\_, 2018, between us and Jefferies LLC and Cowen and Company, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

<b>UNDERWRITER</b>	<b>NUMBER OF SHARES</b>
Jefferies LLC	
Cowen and Company, LLC	
Wells Fargo Securities, LLC	
William Blair & Company, L.L.C.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

Certain of our stockholders (or their affiliates), including those affiliated with certain of our directors, have indicated an interest in purchasing an aggregate of approximately \$30.0 million of shares of our common stock in this offering at the public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer, or no shares in this offering to these entities, or these entities may determine to purchase more, fewer, or no shares of common stock in this offering. The underwriters will receive the same underwriting discounts and commissions on any shares of common stock purchased by these entities as they will on any other shares of common stock sold to the public in this offering.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

### Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ \_\_\_\_\_ per share of common stock. The underwriters may allow, and certain dealers may reallocate, a discount from the concession not in excess of \$ \_\_\_\_\_ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallocation to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

## [Table of Contents](#)

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares to cover over-allotments.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$3,800,000. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to \$35,000, as set forth in the underwriting agreement.

### **Determination of Offering Price**

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

### **Listing**

We have applied to list our common stock on The Nasdaq Global Market under the symbol "KZR."

### **Stamp Taxes**

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

### **Option to Purchase Additional Shares**

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of 700,000 shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above.

### **No Sales of Similar Securities**

We, our officers, directors and holders of all or substantially all of our outstanding capital stock have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer or establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, or

## [Table of Contents](#)

- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of the representatives.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

The representatives of the underwriters may, in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

### **Stabilization**

The underwriters have advised us that they, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on The Nasdaq Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

## **Electronic Distribution**

A prospectus in electronic format may be made available by e-mail or on the web site or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

## **Other Activities and Relationships**

The underwriter and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

Cowen Healthcare Investment II LP owns 1,007,422 shares of our Series B Redeemable Preferred Stock. Cowen Healthcare Investment II LP is an affiliate of Cowen and Company, LLC.

Under the FINRA rules, Mr. Sommadossi is deemed to be a "related person" of William Blair & Company, L.L.C. and, therefore, the 15,747 shares of common stock and options to purchase 8,896 shares of common stock that Mr. Sommadossi acquired or was granted, respectively, since August 2017 are regarded by FINRA as additional compensation to the underwriters and will be subject to FINRA's lock-up requirements.

In the ordinary course of their various business activities, the underwriter and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

## **Selling Restrictions**

### ***Australia***

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

- a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
- a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the Company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

## Table of Contents

- a person associated with the Company under Section 708(12) of the Corporations Act; or
- a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

### **Canada**

*Resale Restrictions.* The distribution of our shares of common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of our shares of common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

*Representations of Canadian Purchasers.* By purchasing our shares of common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares without the benefit of a prospectus qualified under those securities laws as it is an “accredited investor” as defined under National Instrument 45-106-*Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), as applicable,
- the purchaser is a “permitted client” as defined in National Instrument 31-103-*Registration Requirements, Exemptions and Ongoing Registrant Obligations*,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

*Conflicts of Interest.* Canadian purchasers are hereby notified that the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105-*Underwriting Conflicts* from having to provide certain conflict of interest disclosure in this document.

*Statutory Rights of Action.* Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser’s province or territory for particulars of these rights or consult with a legal advisor.

*Enforcement of Legal Rights.* All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

*Taxation and Eligibility for Investment.* Canadian purchasers of our shares of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares in their particular circumstances and about the eligibility of the shares for investment by the purchaser under relevant Canadian legislation.

### **European Economic Area**

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive, each referred to herein as a Relevant Member State, an offer to the public of any common shares which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any common shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a “qualified investor” as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives of the underwriters for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require the Company or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer common shares to the public” in relation to the common shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the common shares to be offered so as to enable an investor to decide to purchase or subscribe to the common shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression “Prospectus Directive” means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression “2010 PD Amending Directive” means Directive 2010/73/EU.

### **Hong Kong**

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong, or SFO, and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong, or CO, or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

### **Japan**

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the Initial Purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to

## Table of Contents

others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

### **Israel**

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

### **Singapore**

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the notes may not be circulated or distributed, nor may the notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the notes 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 notes pursuant to an offer made under Section 275 of the SFA except:

- (i) 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;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

### **Switzerland**

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any

## [Table of Contents](#)

other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, the Company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

### ***United Kingdom***

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (Order) and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated (each such person being referred to as a "relevant person").

This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.



## LEGAL MATTERS

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. Certain legal matters in connection with this offering will be passed upon for the underwriters by Latham & Watkins LLP. As of the date of this prospectus, GC&H Investments, LLC, an entity consisting of current and former partners and associates of Cooley LLP, beneficially holds an aggregate of 9,444 shares of our common stock on an as-converted basis.

**EXPERTS**

The consolidated financial statements of Kezar Life Sciences, Inc. as of December 31, 2017 and 2016, and for each of the years in the two-year period ended December 31, 2017, have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1, including exhibits and schedules, under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

Upon the completion of this offering, we will be subject to the information reporting requirements of the Exchange Act and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and web site of the SEC referred to above. We also maintain a website at [www.kezarlifesciences.com](http://www.kezarlifesciences.com), at which, following the completion of this offering, 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 or accessible through 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.

KEZAR LIFE SCIENCES, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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	<u>PAGE</u>
<b>Audited Consolidated Financial Statements</b>	
<a href="#">Report of Independent Registered Public Accounting Firm</a>	F-2
<a href="#">Consolidated Balance Sheets</a>	F-3
<a href="#">Consolidated Statements of Operations</a>	F-4
<a href="#">Consolidated Statements of Comprehensive Loss</a>	F-5
<a href="#">Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit</a>	F-6
<a href="#">Consolidated Statements of Cash Flows</a>	F-7
<a href="#">Notes to Consolidated Financial Statements</a>	F-8
<b>Unaudited Interim Condensed Consolidated Financial Statements:</b>	
<a href="#">Condensed Consolidated Balance Sheets</a>	F-22
<a href="#">Condensed Consolidated Statements of Operations</a>	F-23
<a href="#">Condensed Consolidated Statements of Comprehensive Loss</a>	F-24
<a href="#">Condensed Consolidated Statements of Cash Flows</a>	F-25
<a href="#">Notes to Condensed Consolidated Financial Statements</a>	F-26

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## Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors  
Kezar Life Sciences, Inc.:

### *Opinion on the Consolidated Financial Statements*

We have audited the accompanying consolidated balance sheets of Kezar Life Sciences, Inc. and subsidiary (the Company) as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, redeemable convertible preferred stock and stockholders' deficit, and cash flows for each of the years in the two year period ended December 31, 2017, and the related notes (collectively, 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 its operations and its cash flows for each of the years in the two year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

### *Basis for Opinion*

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. 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/ KPMG LLP

We have served as the Company's auditor since 2016.

San Francisco, California  
March 16, 2018, except as to note 14, which is as of June 11, 2018

**KEZAR LIFE SCIENCES, INC.**  
**Consolidated Balance Sheets**  
(in thousands, except share and per share amounts)

	<u>DECEMBER 31,</u>	
	<u>2016</u>	<u>2017</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 9,747	\$ 51,033
Prepaid expenses	142	785
Other current assets	598	508
Total current assets	10,487	52,326
Restricted cash	13	13
Property and equipment, net	862	1,540
Other assets	62	343
Total assets	<u>\$ 11,424</u>	<u>\$ 54,222</u>
<b>Liabilities, Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity</b>		
Current liabilities:		
Accounts payable	\$ 466	\$ 547
Accrued liabilities	149	911
Other liabilities, current	36	26
Total current liabilities	651	1,484
Other liabilities, noncurrent	25	494
Total liabilities	676	1,978
Redeemable convertible preferred stock, \$0.001 par value, 33,533,240 and 75,533,240 shares authorized as of December 31, 2016 and 2017, respectively; 5,966,753 and 12,263,126 shares issued and outstanding as of December 31, 2016 and 2017, respectively; aggregate liquidation preference of \$28,369 and \$78,369 as of December 31, 2016 and 2017, respectively; no shares issued and outstanding as of December 31, 2017, pro forma (unaudited)	28,176	77,931
Stockholders' (deficit) equity:		
Common stock, \$0.001 par value, 48,600,000 and 96,000,000 shares authorized as of December 31, 2016 and 2017, respectively; 948,578 shares issued and outstanding as of December 31, 2016 and 2017	1	1
Additional paid-in capital	232	451
Accumulated other comprehensive loss	(150)	(111)
Accumulated deficit	(17,511)	(26,028)
Total stockholders' (deficit) equity	<u>(17,428)</u>	<u>(25,687)</u>
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	<u>\$ 11,424</u>	<u>\$ 54,222</u>

See accompanying notes to the consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Consolidated Statements of Operations**  
(in thousands, except share and per share amounts)

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	YEAR ENDED DECEMBER 31,	
	2016	2017
Operating expenses:		
Research and development	\$ 7,373	\$ 6,469
General and administrative	1,617	2,280
Total operating expenses	<u>8,990</u>	<u>8,749</u>
Loss from operations	(8,990)	(8,749)
Interest income	—	232
Net loss	<u>\$ (8,990)</u>	<u>\$ (8,517)</u>
Net loss per common share, basic and diluted	<u>\$ (26.56)</u>	<u>\$ (14.21)</u>
Weighted-average shares used to compute net loss per common share, basic and diluted	<u>338,446</u>	<u>599,291</u>
Pro forma net loss per common share, basic and diluted (unaudited)		<u>\$ (0.87)</u>
Weighted-average shares used in computing pro forma net loss per common share, basic and diluted (unaudited)		<u>9,762,770</u>

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See accompanying notes to the consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Consolidated Statements of Comprehensive Loss**  
(in thousands)

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	<u>YEAR ENDED DECEMBER 31,</u>	
	<u>2016</u>	<u>2017</u>
Net loss	\$ (8,990)	\$ (8,517)
Other comprehensive (loss) income, net of tax:		
Foreign currency translation adjustments, net of tax	(150)	39
Total other comprehensive (loss) income, net of tax	(150)	39
Comprehensive loss	<u>\$ (9,140)</u>	<u>\$ (8,478)</u>

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See accompanying notes to the consolidated financial statements



**KEZAR LIFE SCIENCES, INC.**
**Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Deficit**  
(in thousands, except share and per share amounts)

	REDEEMABLE CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	SHARES	AMOUNTS	SHARES	AMOUNTS				
Balance at December 31, 2015	5,966,753	\$ 28,176	911,151	\$ 1	\$ 104	\$ —	\$ (8,521)	\$ (8,416)
Issuance of common stock upon exercise of stock options, net of amount related to early exercised options	—	—	37,427	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	128	—	—	128
Other comprehensive loss	—	—	—	—	—	(150)	—	(150)
Net loss	—	—	—	—	—	—	(8,990)	(8,990)
Balance at December 31, 2016	5,966,753	28,176	948,578	1	232	(150)	(17,511)	(17,428)
Issuance of Series B redeemable convertible preferred stock for cash of \$7.942 per share, net of \$245 issuance costs	6,296,373	49,755	—	—	—	—	—	—
Vesting related to common shares issued pursuant to early exercises	—	—	—	—	16	—	—	16
Stock-based compensation expense	—	—	—	—	203	—	—	203
Other comprehensive income	—	—	—	—	—	39	—	39
Net loss	—	—	—	—	—	—	(8,517)	(8,517)
Balance at December 31, 2017	<u>12,263,126</u>	<u>\$ 77,931</u>	<u>948,578</u>	<u>\$ 1</u>	<u>\$ 451</u>	<u>\$ (111)</u>	<u>\$ (26,028)</u>	<u>\$ (25,687)</u>

See accompanying notes to the consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Consolidated Statements of Cash Flows**  
(in thousands)

	YEAR ENDED DECEMBER 31,	
	2016	2017
Cash flows from operating activities:		
Net loss	\$ (8,990)	\$ (8,517)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	154	175
Stock-based compensation	128	203
Changes in operating assets and liabilities:		
Prepaid expenses	—	(643)
Other current assets	(598)	100
Other assets	—	(282)
Accounts payable	(543)	81
Accrued liabilities	74	763
Other liabilities, current	—	6
Other liabilities, noncurrent	15	5
Net cash used in operating activities	<u>(9,760)</u>	<u>(8,109)</u>
Cash flows from investing activities:		
Purchase of property and equipment	(132)	(389)
Net cash used in investing activities	<u>(132)</u>	<u>(389)</u>
Cash flows from financing activities:		
Proceeds from issuance of preferred stock (net of issuance costs)	—	49,755
Proceeds from exercises of stock options	36	—
Net cash provided by financing activities	<u>36</u>	<u>49,755</u>
Effect of exchange rate changes on cash and cash equivalents and restricted cash	(150)	29
Net (decrease) increase in cash and cash equivalents and restricted cash	(10,006)	41,286
Cash and cash equivalents and restricted cash at beginning of period	19,766	9,760
Cash and cash equivalents and restricted cash at end of period	<u>\$ 9,760</u>	<u>\$ 51,046</u>
Supplemental disclosures of noncash investing and financing items:		
Reclassification of employee stock liability to equity upon vesting	<u>\$ —</u>	<u>\$ 16</u>
Tenant improvement paid for by landlord	<u>\$ —</u>	<u>\$ 464</u>

See accompanying notes to the consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
Notes to Consolidated Financial Statements

**1. Organization and Description of the Business**

***Description of Business***

Kezar Life Sciences, Inc. (the Company) was incorporated in Delaware on February 19, 2015 and commenced operations in June 2015. The Company is a clinical-stage biotechnology company, discovering and developing novel small molecule therapeutics to treat unmet needs in autoimmunity and cancer. The Company's lead product candidate, KZR-616, a first-in-class selective immunoproteasome inhibitor, has completed testing in healthy volunteers and is now enrolling a Phase 1b/2 clinical trial in lupus and lupus nephritis. The Company is also leveraging its protein secretion pathway research platform to discover and develop small molecule therapies targeting cancer and immuno-oncology. To date, the Company's primary activities have been related to the establishment of its facilities, recruitment of personnel and conducting development of its product candidates, including clinical trials. The Company's principal operations are located in South San Francisco, California, and it operates in one segment.

***Liquidity***

Since commencing operations in mid-2015, substantially all of the Company's efforts have been focused on research, development, and the advancement of the Company's lead product candidate, KZR-616. The Company's ultimate success depends on the outcome of the ongoing research and development activities. The Company has not yet generated product sales and as a result has experienced operating losses since inception and had an accumulated deficit of \$26.0 million as of December 31, 2017. The Company expects to incur additional losses in the future to conduct research and development and will need to raise additional capital to fully implement management's business plan. The Company intends to raise such capital through the issuance of additional equity, and potentially through borrowings, strategic alliances with partner companies and other licensing transactions. However, if such financing is not available at adequate levels, the Company may need to reevaluate its operating plans. Management believes that its existing cash and cash equivalents will be sufficient to fund the Company's cash requirements for at least 12 months following the date of the issuance of these financial statements.

**2. Summary of Significant Accounting Policies**

***Basis of Presentation and Consolidation***

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (U.S. GAAP) and include the Company's accounts and those of its wholly owned subsidiary. All intercompany balances and transactions have been eliminated upon consolidation.

***Use of Estimates***

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant items subject to such estimates and assumptions include the useful lives of fixed assets, stock-based compensation, and accrued research and development costs. Management bases its estimates on historical experience and on various other market-specific relevant assumptions that management believes to be reasonable under the circumstances. Actual results may differ from those estimates.

***Foreign Currency Translation***

The functional currency of the Company's non-U.S. subsidiary is the Australian dollar. Asset and liability balances denominated in non-U.S. dollar currency are translated into U.S. dollars using period-end exchange rates, while expenses are based upon the exchange rate at the time of the transaction, if known, or at the average rate for the period. Equity accounts, except for the change in accumulated deficit during the year, have been translated using historical exchange rates. Differences are included in stockholders' equity as a component of accumulated other comprehensive loss.

## [Table of Contents](#)

### **Cash and Cash Equivalents and Restricted Cash**

The Company considers all highly liquid investments with original maturities of three months or less at the time of purchase to be cash equivalents. Cash equivalents consist of highly liquid money market funds.

Restricted cash consists of deposits at the bank held as collateral for the Company's credit card program.

The following tables provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that sum to the total of the same amounts shown in the statements of cash flows (in thousands):

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	<u>DECEMBER 31,</u>	
	<u>2016</u>	<u>2017</u>
Cash and cash equivalents	\$9,747	\$51,033
Restricted cash	13	13
Total cash, cash equivalents, and restricted cash shown in the statements of cash flows	<u>\$9,760</u>	<u>\$51,046</u>

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### **Concentration of Credit Risk**

Financial instruments that potentially expose the Company to credit risk consist of cash and cash equivalents. The majority of the Company's cash and cash equivalents are held by financial institutions in the United States, while a small amount is held by a financial institution in Australia. U.S. amounts on deposit may at times exceed federally insured limits.

### **Long-Lived Assets**

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying amount. If the carrying amount of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. Fair value is determined using various valuation techniques including discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary. No impairment losses were recognized during the years ended December 31, 2016 and December 31, 2017.

### **Property and Equipment**

Property and equipment are stated at cost, less accumulated depreciation. Depreciation on property and equipment is calculated on the straight-line method over the estimated useful lives of the assets. The estimated useful life of furniture, laboratory and office equipment is five years, and the useful life of computer equipment is three years. The useful life of leasehold improvements is assumed to be the shorter of the useful life or the remaining lease term.

### **Other Assets**

Other assets consist of security deposits for the Company's operating leases of office and laboratory space.

### **Fair Value of Financial Instruments**

The Company applies fair value accounting for all financial assets and liabilities and nonfinancial assets and liabilities that are required to be recognized or disclosed at fair value in the financial statements. The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Where observable prices or inputs are not available valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

The Company's financial instruments consist principally of cash and cash equivalents and accounts payable. The fair value of the Company's cash equivalents is determined based on quoted prices in active markets for identical assets. The recorded value of the Company's accounts payable approximates its current fair value due to the relatively short-term nature of the account.

### **Research and Development Costs**

Research and development costs are expensed as incurred and consist primarily of salaries and benefits, stock-based compensation expense, lab supplies and facility costs, as well as fees paid to nonemployees and entities that conduct certain research and development activities on the Company's behalf and expenses incurred in connection with license agreements. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are capitalized and then expensed as the related goods are delivered or the services are performed.

The Company accrues for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical and clinical studies and contract manufacturing activities. The Company estimates the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. The Company makes significant judgments and estimates in determining the accrued balance in each reporting period. As actual costs become known, the Company adjusts the accrued estimates. Although the Company does not expect the estimates to be materially different from amounts actually incurred, the status and timing of services performed, the number of patients enrolled and the rate of patient enrollment may vary from the Company's estimates and could result in the Company reporting amounts that are too high or too low in any particular period. The Company's accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. For the years ended December 31, 2016 and 2017, there have been no material differences from the Company's accrued expenses to actual expenses.

### **Research and Development Tax Incentive**

The Company is eligible under the AusIndustry Research and Tax Development Tax Incentive Program to obtain a cash amount from the Australian Taxation Office (ATO). The tax incentive is available to the Company on the basis of specific criteria with which the Company must comply related to research and development expenditures in Australia. These research and development tax incentives are recognized as contra research and development expense when the right to receive has been attained and funds are considered to be collectible.

The Company recognized \$385,000 and \$499,000 as a reduction of research and development expenses for the years ended December 31, 2016 and December 31, 2017, respectively, in connection with the research and development tax incentive from the ATO. As of December 31, 2016 and 2017, the research and development tax credit receivable was \$377,000 and \$498,000, respectively, which is included in other current assets in the consolidated balance sheets.

### **Stock-Based Compensation**

Stock-based awards issued to employees and directors, including stock options, are recorded at fair value as of the grant date using the Black-Scholes option pricing model and recognized as expense on a straight line-basis over the employee's or director's requisite service period (generally the vesting period).

Stock-based awards and stock options issued to nonemployee consultants are recorded at fair value as of the grant date using the Black-Scholes option pricing model. The unearned portion of the stock-based compensation is remeasured at each reporting period using the Black-Scholes option pricing model, and the resulting change in fair value is recognized in the statement of operations over the remaining period the related services are rendered.

### **Income Taxes**

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

The Company records a valuation allowance against deferred tax assets if it is more likely than not that a portion or all of the asset will not be realized in future periods. In making such determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operations.

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. 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 charges or penalties related to unrecognized tax benefits.

**Net Loss per Share**

Basic net loss per share is calculated by dividing the net loss by the weighted average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is the same as basic net loss per share for the periods presented since the effects of potentially dilutive securities are antidilutive given the net loss of the Company.

**Unaudited Pro Forma Net Loss per Share**

Unaudited pro forma basic and diluted net loss per share has been computed to give effect to the conversion of the redeemable convertible preferred stock into common stock as if such conversion had occurred at the earlier of the beginning of the period or the date of issuance, if later. The unaudited pro forma net loss per share does not include the shares expected to be sold and related proceeds to be received from the IPO.

**Prior Period Revision**

Reclassifications of certain prior period amounts have been made to conform to the current period presentation. In addition, for the year ended December 31, 2016, a reclassification of \$385,000 was made resulting in an increase in general and administrative expenses and a decrease in research and development expenses for certain Australian Research and Development Tax Incentive tax credits received. The reclassification had no impact on the Company's net loss or financial position.

**Recently Issued Accounting Pronouncements**

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, "Leases." ASU 2016-02 increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and requires disclosing key information about leasing arrangements. ASU 2016-02 is effective for annual periods beginning after December 15, 2019. Management does not expect the adoption of ASU 2016-02 to have a material effect on its business. The Company is currently evaluating the effect the update will have on its financial statements and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting," which simplifies several aspects of the accounting for employee share-based payment transactions including the accounting for income taxes, forfeitures and statutory tax withholding requirements, as well as classification in the statement of cash flows. For nonpublic business entities, the amendments in this update are effective for annual periods beginning after December 15, 2017. Early adoption is permitted. Upon adoption, entities will be required to apply a modified retrospective, prospective or retrospective transition method depending on the specific section of the guidance being adopted. The Company adopted ASU No. 2016-09 effective January 1, 2017, on a prospective basis. The impact of adopting ASU 2016-09 resulted in the following:

- The Company will classify the excess income tax benefits from stock-based compensation arrangements as a discrete item within income tax expense, rather than recognizing such excess income tax benefits in additional paid-in capital. The adoption of this guidance had no material impact to the Company's consolidated financial statements due to a full valuation allowance recognized against the Company's deferred tax assets.
- The Company elected to recognize forfeitures as they occur. The cumulative effect adjustment as a result of the adoption of this guidance on a modified retrospective basis was insignificant.

There was no material impact to the Company's consolidated financial statements as a result of adopting this updated standard.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. Under ASU 2016-18, the statement of cash flows will show the changes in the total cash, cash equivalents and amounts generally described as restricted cash. As a result, entities will no longer have to determine how to classify transfers

## [Table of Contents](#)

to or from restricted cash within the statement of cash flows. An entity will be required to reconcile the total cash, cash equivalents and amounts generally described as restricted cash on the statement of cash flows to amounts in the balance sheet and disclose the nature of any restriction on its cash, cash equivalents or amounts generally described as restricted cash. This new standard is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. The guidance will be applied retrospectively. If it is impractical for an entity to do so, the entity will apply the guidance prospectively as of the earliest date that is practicable. The Company adopted this standard for the year ended December 31, 2017, and prior-period statement of cash flow has been adjusted to reflect the adoption of the new standard.

### 3. Balance Sheet Components

#### **Property and Equipment, Net**

Property and equipment, net, consists of the following (in thousands):

	DECEMBER 31,	
	2016	2017
Furniture, laboratory and office equipment	\$ 868	\$1,242
Leasehold improvements	155	155
Computer equipment	19	34
Construction in progress	—	464
Total property and equipment	1,042	1,895
Less accumulated depreciation and amortization	(180)	(355)
Property and equipment, net	<u>\$ 862</u>	<u>\$1,540</u>

#### **Accrued Liabilities**

Accrued liabilities consisted of the following (in thousands):

	DECEMBER 31,	
	2016	2017
Accrued employee-related costs	\$ —	\$ 422
Accrued preclinical and research costs	114	108
Accrued clinical costs	—	340
Accrued third-party manufacturing costs	20	23
Other	15	18
Accrued liabilities	<u>\$ 149</u>	<u>\$ 911</u>

### 4. Redeemable Convertible Preferred Stock

Redeemable convertible preferred stock as of December 31, 2016 consisted of the following (in thousands, except share amounts):

REDEEMABLE CONVERTIBLE PREFERRED STOCK	SHARES AUTHORIZED	SHARES ISSUED AND OUTSTANDING	NET PROCEEDS AFTER ISSUANCE COSTS	LIQUIDATION PREFERENCE
Series A	33,533,240	5,966,753	\$ 28,176	\$ 28,369
Total	<u>33,533,240</u>	<u>5,966,753</u>	<u>\$ 28,176</u>	<u>\$ 28,369</u>

[Table of Contents](#)

Redeemable convertible preferred stock as of December 31, 2017 consisted of the following (in thousands, except share amounts):

<b>REDEEMABLE CONVERTIBLE PREFERRED STOCK</b>	<b>SHARES AUTHORIZED</b>	<b>SHARES ISSUED AND OUTSTANDING</b>	<b>NET PROCEEDS AFTER ISSUANCE COSTS</b>	<b>LIQUIDATION PREFERENCE</b>
Series A	33,533,240	5,966,753	\$ 28,176	\$ 28,369
Series B	42,000,000	6,296,373	49,755	50,000
Total	<u>75,533,240</u>	<u>12,263,126</u>	<u>\$ 77,931</u>	<u>\$ 78,369</u>

Significant provisions of the redeemable convertible preferred stock are as follows:

**Voting Rights**

The holders of Series A redeemable convertible preferred stock (Series A) and Series B redeemable convertible preferred stock (Series B) have voting rights equal to the whole number of shares of common stock into which such shares of Series A and Series B are then convertible, respectively. Except as provided by law or by the other provisions of the Company's amended and restated certificate of incorporation, holders of Series A and Series B shall vote together with the holders of common stock as a single class. The holders of Series A are entitled to elect one member of the board of directors and the holders of Series B are entitled to elect one member of the board of directors.

**Dividend Rights**

Holders of Series A and Series B shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at a rate of \$0.383 per share and \$0.636 per share, respectively, per annum on such shares of redeemable convertible preferred stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization). The dividends shall be noncumulative and payable only when, and if, declared by the board of directors, and the Company shall otherwise be under no obligation to pay such dividends. Dividend preference and priority shall be given to holders of outstanding shares of Series A and Series B over any declaration, payment or setting aside of any dividend on common stock.

**Conversion Rights**

Each share of Series A and each share of Series B is convertible, at the option of the holder, at any time and without the payment of additional consideration by the holder thereof, into the number of fully paid and nonassessable shares of common stock determined by dividing the original issue price per share of that series by the conversion price for such series in effect at the time of conversion.

Each share of Series A and each share of Series B shall automatically be converted into shares of common stock at the then-effective conversion rate for such share either: (i) upon the closing of a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, provided that the offering price per share is not less than \$7.942 (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to common stock) and the gross proceeds to the Company are not less than \$40,000,000; or (ii) by vote or written consent of the holders of at least a majority of the then outstanding shares of redeemable convertible preferred stock (voting together as a single class on an as-converted basis) and the holders of at least 55% of the then outstanding shares of Series B (voting together as a separate class on an as-converted basis).

**Liquidation Preference/Redemption Provision**

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company or a deemed liquidation event, the holders of the then outstanding shares of Series B shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders before any payment is made to the holders of the Series A and the holders of the common stock by reason of their ownership, an amount per share equal to the greater of: (i) the Series B original issue price (\$7.942), plus any declared, unpaid dividends; or (ii) such amount per share that would have been payable had all shares of Series B been converted into common stock prior to such liquidation,



## [Table of Contents](#)

dissolution, winding up or deemed liquidation event. If upon the liquidation, dissolution, or winding up of the Company or deemed liquidation event, the assets of the Company legally available for distribution to its stockholders are insufficient to pay the holders of shares of Series B the full amount to which they are entitled, then the holders of shares of Series B shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable if all amounts payable or on with respect to such shares were paid in full. After the payment of all amounts required to be paid to the holders of shares of Series B, the remaining assets of the Company available for distribution to its stockholders will be distributed among the holders of shares of the Series A. The holders of shares of Series A then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders an amount per share equal to the greater of: (i) the Series A original issue price (\$4.755), plus any declared but unpaid dividends; or (ii) such amount per share as would have been payable had all shares of Series A redeemable convertible preferred stock been converted into common stock prior to such liquidation, dissolution, winding up or deemed liquidation event. After the preferential payment for the Series A and Series B, the remaining assets of the Company available for distribution to its stockholders shall be distributed among the holders of shares of common stock, pro rata based on the number of shares held by each such holder.

In the event of a deemed liquidation event, if the Company does not effect a dissolution of the Company within 90 days after such deemed liquidation event, the holders of the Series A redeemable convertible preferred stock and the holders of the Series B redeemable convertible preferred stock have the right to require the redemption of such shares. This right is at the option of the holder and is considered to be outside the control of the Company as the holders of the Series A and Series B hold a majority of the voting rights. As a result, the Company has classified all of its Series A and Series B as temporary equity in its financial statements as the stock is contingently redeemable. The Series A and Series B have been recognized at their issuance date fair value, or transaction price. If it becomes probable that a deemed liquidation event will occur, the Series A and Series B will be adjusted to the stated redemption value.

### **5. Common Stock**

As of December 31, 2017, the Company has reserved sufficient shares of common stock for issuance upon the exercise of stock options subject to future vesting. Management has reserved shares of common stock, on an as-converted basis, for future issuance as follows:

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Series A redeemable convertible preferred stock outstanding, as converted	5,966,753
Series B redeemable convertible preferred stock outstanding, as converted	6,296,373
Options issued and outstanding	1,213,010
Shares available for future grant under the 2015 Plan	1,322,628
Total common stock reserved for issuance	<u>14,798,764</u>

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### **General**

The voting, dividend, and liquidation rights of the holders of common stock are subject to and qualified by the rights, powers and preferences of the holders of the redeemable convertible preferred stock.

### **Voting Rights**

The holders of common stock are entitled to one vote for each share of common stock held. The holders of common stock, exclusively and as a separate class, are entitled to elect two members of the board of directors.

### **6. Stock-Based Compensation**

#### **Stock Compensation Plan**

On June 9, 2015, the Company adopted the 2015 Equity Incentive Plan (the 2015 Plan), as amended, pursuant to which the board of directors, or an appointed committee of the board of directors, may grant stock options, stock appreciation rights, restricted stock or restricted stock units to the Company's employees, directors and consultants. With the exception of a company effected transaction as defined by Section 424(a) of the Internal Revenue Code

## [Table of Contents](#)

(corporate merger, consolidation, acquisition of property or stock, separation, reorganization, or liquidation), stock options may be granted with an exercise price no less than 100% of the fair market value of a share of common stock on the date of grant; provided, however, that incentive stock options granted to significant stockholders may be granted with an exercise price no less than 110% of the fair market value of a share of common stock on the date of grant. The stock options granted under the 2015 Plan generally expire on the tenth anniversary of the grant date; provided, however, that incentive stock options granted to significant stockholders cannot have a term greater than five years from the date of grant.

### **Stock Option Activity**

The following table summarizes activity under the Company's stock option plan and related information (in thousands except share and per share amounts):

	<u>OPTIONS AVAILABLE TO GRANT</u>	<u>NUMBER OF OPTIONS OUTSTANDING</u>	<u>WEIGHTED AVERAGE EXERCISE PRICE</u>	<u>WEIGHTED AVERAGE REMAINING CONTRACTUAL TERM</u>	<u>AGGREGATE INTRINSIC VALUE</u>
Outstanding at December 31, 2016	965,626	680,333	\$ 0.97	8.9	
Shares authorized	889,679	—	—		
Granted	(532,677)	532,677	\$ 2.27		
Outstanding at December 31, 2017	<u>1,322,628</u>	<u>1,213,010</u>	\$ 1.54	8.7	\$ 999
Vested and exercisable at December 31, 2017		<u>464,348</u>	\$ 0.94	7.8	\$ 660

The weighted average grant date fair value of options granted during the years ended December 31, 2016 and 2017 was \$0.78 and \$1.61, respectively. The 2015 Plan allows for early exercisable option grants, which permit the grantee to exercise a stock option in exchange for stock before the requisite service is provided (e.g., before the award is vested under its original terms); however, such arrangements permit the Company to subsequently repurchase such shares at the exercise price if the vesting conditions are not satisfied. To date, the Company has made such grants only to non-employee board members. The total intrinsic value of exercised stock options during the year ended December 31, 2016 was \$0, as the fair market value remained unchanged from the prior year. The aggregate intrinsic value is calculated as the difference between the exercise price and the estimated fair value of the Company's common stock at the date of exercise.

### **Stock-Based Compensation Expense**

Total stock-based compensation recognized by function was as follows (in thousands):

	<u>YEAR ENDED DECEMBER 31,</u>	
	<u>2016</u>	<u>2017</u>
General and administrative	\$ 64	\$ 110
Research and development	64	93
Total stock-based compensation expense	<u>\$ 128</u>	<u>\$ 203</u>

## Table of Contents

As of December 31, 2017, the unrecognized stock-based compensation cost and the estimated weighted average amortization period, using the straight-line attribution method, was as follows (dollars in thousands):

	UNRECOGNIZED COMPENSATION COST	WEIGHTED AVERAGE REMAINING AMORTIZATION PERIOD (YEARS)
Employee options	\$ 969	3.17
Nonemployee options	3	1.49
Total unrecognized stock-based compensation expense	<u>\$ 972</u>	

The fair value of the shares of common stock underlying stock options was determined by the Company's board of directors. Because there was no public market for the Company's common stock, the board of directors determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including important developments in the Company's operations, valuations performed by an independent third party, sales of redeemable convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of the Company's common stock, among other factors.

In determining the fair value of the options granted, the Company used the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

*Expected Term*—The Company uses the simplified method (based on the mid-point between the vesting date and the end of the contractual term) to estimate the expected term of the option. Management has had limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for Company stock option grants. The simplified method makes the assumption that the employee will exercise share options evenly over the period when the share options are vested and ending on the date when the share options would expire.

*Expected Volatility*—Since the Company's shares are not publicly traded and its shares are rarely traded privately, expected volatility is estimated based on the average historical volatility of similar entities with publicly traded shares. When selecting comparable publicly traded biopharmaceutical companies on which the Company has based its expected stock price volatility, the Company selected companies with comparable characteristics to it, including enterprise value, risk profile and position within the industry and with historical share price information sufficient to meet the expected life of the stock-based awards.

*Risk-Free Interest Rate*—The risk-free interest rate is based on the U.S. Treasury zero-coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

*Expected Dividend*—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company has used an expected dividend yield of zero.

The fair value of the employee stock options granted is calculated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Valuation assumptions:		
Expected term (years)	6.08	6.08
Expected volatility	80.36%	89.81%
Risk-free interest rate	1.41%	1.96%
Expected dividend	—%	—%

**Early Exercise Stock Purchase Agreements**

As of December 31, 2016 and 2017, there were 82,651 and 45,224, respectively, of nonvested common shares outstanding that were exercised early and subject to repurchase by the Company at the original issuance price upon termination of the stockholder's services. The right to repurchase these shares generally lapses with respect to 25% of the shares underlying the option after the applicable vesting commencement date and 1/48 of the shares underlying the original grant per month for 36 months thereafter. The shares purchased pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest. The cash received in exchange for exercised and nonvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the balance sheets with the corresponding par value in common stock and an offset in additional paid-in capital. As of December 31, 2016 and 2017, the Company recorded in other current liabilities \$34,000 and \$18,000, respectively, associated with shares issued upon the early exercise of stock options that are subject to repurchase.

**Restricted Stock**

In addition to the nonvested common shares outstanding described above at "Early Exercise Stock Purchase Agreements," the Company issued restricted stock to its founders. The fair value of restricted stock on the issuance date is deemed equal to the cash consideration paid by the founders. Restricted stock vests over a four-year period from the applicable vesting commencement date. The following summarizes the activity of nonvested restricted stock:

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	NUMBER OF SHARES
Nonvested—December 31, 2016	402,468
Vested	(209,074)
Nonvested—December 31, 2017	<u>193,394</u>

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**7. Commitments & Contingencies****Contractual Obligations and Other Commitments**

The Company was obligated under an operating lease covering its combination office and laboratory space at 300 Utah Avenue, South San Francisco, California. The current lease expires five years from its execution on July 1, 2015. Subsequent to December 31, 2017, the lease was terminated with an effective date of April 1, 2018.

In August 2017, the Company entered into a lease agreement to lease 24,357 square feet of combination laboratory and office space in 4000 Shoreline Court, South San Francisco, California. The lease commenced on March 1, 2018 and terminates on February 28, 2025.

The Company recognizes rent expense on a straight-line basis over the noncancelable lease period and records the difference between cash rent payments and the recognition of rent expense as deferred rent liability.

Future minimum lease payments are as follows as of December 31, 2017 (in thousands):

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Year ending December 31:	
2018	\$ 1,974
2019	2,339
2020	2,170
2021	1,996
2022	2,056
Thereafter	4,664
Total future minimum lease payments	<u>\$15,199</u>

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**Indemnification**

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by California corporate law. The Company currently has directors' and officers' insurance.

**8. License Agreement**

In June 2015, the Company entered into an exclusive license agreement with Onyx Therapeutics, Inc., an Amgen Inc. subsidiary (Onyx), a related party, for a worldwide, exclusive license under certain patents, and a non-exclusive license to certain know-how, in each case controlled by Onyx and relating to the Company's immunoproteasome program. The Company may also be required to make future payments of up to \$172.5 million upon achievement of certain development and commercial milestones, as well as pay royalties in the mid to high single digits on future annual net sales, if any.

**9. Defined Contribution Plan**

The Company has a qualified 401(k) Savings and Investment Plan (the Plan) whereby employees may contribute up to the lesser of \$53,000 or 100% of their pre-tax compensation. The total contributed amount from the employees is only up to Federal annual limits. The Company matches \$1.00 for every \$1.00 contributed to the Plan by participants up to 4% of base compensation (subject to statutory limits). During the years ended December 31, 2016 and 2017, the Company contributed \$62,000 and \$77,000, respectively, to the Plan.

**10. Income Taxes**

No provision for income taxes was recorded for the years ended December 31, 2016 and 2017. The Company has incurred net operating losses for all the periods presented.

The following table presents domestic and foreign components of net loss for the periods presented (in thousands):

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	YEAR ENDED DECEMBER 31,	
	2016	2017
Domestic	(7,009)	(7,551)
Foreign	(1,981)	(966)
Total	<u>\$(8,990)</u>	<u>\$(8,517)</u>

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On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the Tax Act) was signed into law. The Tax Act reduces the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%. Although the Tax Act is generally effective January 1, 2018, GAAP requires recognition of the tax effects of new legislation during the reporting period that includes the enactment date, which was December 22, 2017. The primary impact of the Tax Act resulted from the re-measurement of deferred tax assets and liabilities due to the change in the corporate tax rate, reducing our deferred tax assets by \$2.7 million with a corresponding reduction in our valuation allowance, which had no effect on our effective tax rate.

As of December 31, 2017, the Company has not assessed the impact of the changes arising from the Tax Act that are effective in tax year 2018 and onward and will be included in the 2018 financial statements as interpreted

## Table of Contents

guidance is further released. The Company has also not yet made a policy election with respect to its treatment of potential global intangible low-taxed income ("GILTI"). Companies can either account for taxes on GILTI as incurred or recognize deferred taxes when basis differences exist that are expected to affect the amount of the GILTI inclusion upon reversal. The Company is still in the process of analyzing the provisions of the Act associated with GILTI and the expected impact of GILTI on the Company in the future.

The effective tax rate of the provision for income taxes differs from the federal statutory rate as follows:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Federal statutory income tax rate	34.0%	34.0%
State taxes, net of federal benefit	5.8	6.0
Foreign tax rate differential	(0.9)	(0.5)
Permanent differences	(2.0)	(3.8)
Research and development credit	2.6	2.5
Federal rate change impact	—	(31.4)
Change in valuation allowance	(39.5)	(6.8)
Provision for income taxes	—%	—%

The components of the deferred tax assets and liabilities are as follows (in thousands):

	DECEMBER 31,	
	2016	2017
Deferred tax assets		
Reserve and accruals	\$ 20	\$ 169
Net operating loss carry forwards	6,607	6,802
Research and development credit carryforwards	453	515
Gross deferred tax assets	7,080	7,486
Valuation allowance	(7,036)	(7,434)
Net deferred tax assets	44	52
Deferred tax liabilities		
Property and equipment	(44)	(52)
Net deferred tax assets	\$ —	\$ —

Realization of the deferred tax assets is dependent upon future taxable income. Since the amount and timing of future income are uncertain, the net deferred tax assets, as of December 31, 2016 and December 31, 2017 have been fully offset by a valuation allowance. The valuation allowance increased by approximately \$3.6 million during the year ended December 31, 2016 and increased by \$398,000 during the year ended December 31, 2017.

As of December 31, 2017, the Company had federal net operating loss (NOL) carryforwards of \$22.2 million and a federal research and development tax credit carryforward of \$283,000. If not utilized sooner, the federal NOL and tax credit carryforwards will expire, beginning in 2035. As of December 31, 2017, the Company had a state NOL carryforward of \$22.4 million, which will expire beginning in 2035, and a state research and development tax credit carryforward of \$352,000, which does not expire.

As of December 31, 2017, the Company also had accumulated Australian tax losses of \$1.9 million available for carry forward against future earnings, which under relevant tax laws do not expire but may not be available under certain circumstances.

## [Table of Contents](#)

In general, if the Company experiences a greater than 50 percentage point aggregate change in ownership over a three-year period (a Section 382 ownership change), utilization of the Company's pre-change NOL carryforwards is subject to an annual limitation under Section 382 of the Internal Revenue Code and similar California laws. The annual limitation generally is determined by multiplying the value of the Company's stock at the time of such ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Such limitations may result in expiration of a portion of the NOL carryforwards before utilization. The Company has not utilized any NOL carryforwards through December 31, 2017. In addition, the Company's deferred tax assets are subject to a full valuation allowance, and thus no benefit for deferred tax assets is recorded on the Company's books. The Company's ability to use the remaining NOL carryforwards may be further limited if the Company experiences a Section 382 ownership change as a result of future changes in the Company's stock ownership.

No liability related to uncertain tax positions is recorded on the financial statements. Since inception, there have been no interest charges or penalties related to unrecognized tax benefits.

The Company files income tax returns in the United States federal jurisdiction, the State of California and Australia. The Company currently has no federal, state or other jurisdictions tax examinations in progress. The Company did not recognize any accrued interest and penalties related to gross unrecognized tax benefits related to the year ended December 31, 2017. All years are open for examination by federal and state authorities.

### 11. Net Loss Per Share

The following table sets forth the calculation of basic and diluted net loss per share during the periods presented (in thousands, except share and per share data):

	YEAR ENDED DECEMBER 31,	
	2016	2017
<b>Numerator:</b>		
Net loss	\$ (8,990)	\$ (8,517)
<b>Denominator:</b>		
Weighted-average shares of common stock outstanding	338,446	599,291
Net loss per share, basic and diluted	\$ (26.56)	\$ (14.21)

The following outstanding shares of common stock equivalents were excluded from the computation of the diluted net loss per share for the periods presented because their effect would have been anti-dilutive:

	YEAR ENDED DECEMBER 31,	
	2016	2017
Redeemable convertible preferred stock on an if converted basis	5,966,753	12,263,126
Stock options to purchase common stock	680,333	1,213,010
Common stock subject to future vesting	485,119	238,618
Total	7,132,205	13,714,754

### 12. Unaudited Pro Forma Net Loss Per Share

Unaudited pro forma net loss per share was computed to give effect to the conversion of all shares of redeemable convertible preferred stock using the if converted method as though the conversion had occurred as of the beginning of the period or the date of issuance, if later.

## [Table of Contents](#)

The following table sets forth the computation of the unaudited pro forma net loss per share (in thousands, except share and per share amounts):

	YEAR ENDED DECEMBER 31, 2017
<b>Numerator:</b>	
Net loss	\$ (8,517)
<b>Denominator:</b>	
Weighted-average shares of common stock used in computing net loss per share	599,291
Weighted-average pro forma adjustment to reflect assumed conversion of redeemable convertible preferred stock	9,163,479
Weighted-average shares of common stock used in computing pro forma net loss per share	9,762,770
Pro forma net loss per share, basic and diluted	\$ (0.87)

### 13. Related Party Disclosure

#### ***Consulting Agreement with Michael Kauffman***

On April 1, 2017, the Company entered into a consulting agreement with Michael Kauffman, a member of its board of directors. This agreement provides that Dr. Kauffman shall provide clinical and scientific advisory services and participate on our board of directors in exchange for a monthly fee of \$3,000, payable on the first of the month. The consulting agreement may be terminated by either party on 15 days' written notice. For the year ended December 31, 2017, the Company recognized \$27,000 as consulting expense for the agreement.

#### ***License Agreement with Onyx***

In June 2015, the Company issued 1,121,384 shares of its Series A redeemable convertible preferred stock to Onyx Therapeutics, Inc. in exchange for an exclusive license. The shares represented approximately 8.5% of the Company's total outstanding shares as of December 31, 2017. See Note 8 for a discussion of the Onyx license agreement.

### 14. Subsequent Events

#### ***Reverse Stock Split***

On June 8, 2018, the Company filed an Amended and Restated Certificate of Incorporation effecting a 1-for-5.62 reverse stock split of its issued and outstanding common stock and redeemable convertible preferred stock. The par value of the authorized stock was not adjusted as a result of the reverse stock split. In connection with the reverse stock split, the filed Amended and Restated Certificate of Incorporation also adjusted the minimum price per share required in a firm-commitment underwritten public offering of the Company's common stock in order for the preferred stock to automatically convert to common stock. The minimum price post-split was \$15.884 and has been adjusted to now be \$7.942. The Company did not adjust the number of authorized shares of common stock or redeemable convertible preferred stock. Other than the par value and the number of authorized shares of common stock, all share and per share data shown in the accompanying consolidated financial statements and related notes have been retroactively revised to reflect the reverse stock split.



**KEZAR LIFE SCIENCES, INC.**  
**Condensed Consolidated Balance Sheets**  
(In thousands, except share and per share amounts)

	DECEMBER 31, 2017 (Note 2)	MARCH 31, 2018 (Unaudited)	PRO FORMA STOCKHOLDERS' EQUITY AS OF MARCH 31, 2018 (Unaudited)
<b>Assets</b>			
Current assets:			
Cash and cash equivalents	\$ 51,033	\$ 47,085	
Prepaid expenses	785	1,376	
Other current assets	508	1,856	
Total current assets	52,326	50,317	
Restricted cash	13	13	
Property and equipment, net	1,540	3,617	
Other assets	343	304	
Total assets	<u>\$ 54,222</u>	<u>\$ 54,251</u>	
<b>Liabilities, Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity</b>			
Current liabilities:			
Accounts payable	\$ 547	\$ 717	
Accrued liabilities	911	3,431	
Deferred rent, current	—	358	
Other liabilities, current	26	175	
Total current liabilities	1,484	4,681	
Deferred rent, noncurrent	494	2,128	
Total liabilities	1,978	6,809	
Redeemable convertible preferred stock, \$0.001 par value, 75,533,240 shares authorized as of December 31, 2017 and March 31, 2018 (unaudited); 12,263,126 shares issued and outstanding as of December 31, 2017 and March 31, 2018 (unaudited); aggregate liquidation preference of \$78,369 as of December 31, 2017 and March 31, 2018 (unaudited); no shares issued and outstanding as of March 31, 2018, pro forma (unaudited)	77,931	77,931	\$ —
Stockholders' (deficit) equity:			
Common stock, \$0.001 par value, 96,000,000 shares authorized as of December 31, 2017 and March 31, 2018 (unaudited); 948,578 and 1,058,396 shares issued and outstanding as of December 31, 2017 and March 31, 2018, respectively (unaudited); 13,321,522 shares issued and outstanding as of March 31, 2018, pro forma (unaudited)	1	1	13
Additional paid-in capital	451	619	78,538
Accumulated other comprehensive loss	(111)	(134)	(134)
Accumulated deficit	(26,028)	(30,975)	(30,975)
Total stockholders' (deficit) equity	(25,687)	(30,489)	\$ 47,442
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	<u>\$ 54,222</u>	<u>\$ 54,251</u>	

See accompanying notes to the unaudited interim condensed consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Condensed Consolidated Statements of Operations**  
**(Unaudited)**  
(In thousands, except share and per share amounts)

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	THREE MONTHS ENDED	
	MARCH 31,	
	2017	2018
Operating expenses:		
Research and development	\$ 1,831	\$ 3,572
General and administrative	426	1,514
Total operating expenses	<u>2,257</u>	<u>5,086</u>
Loss from operations	(2,257)	(5,086)
Interest income	—	139
Net loss	<u>\$ (2,257)</u>	<u>\$ (4,947)</u>
Net loss per common share, basic and diluted	<u>\$ (4.43)</u>	<u>\$ (6.53)</u>
Weighted-average shares used to compute net loss per common share, basic and diluted	<u>509,143</u>	<u>757,399</u>
Pro forma net loss per common share, basic and diluted		<u>\$ (0.38)</u>
Weighted-average shares used in computing pro forma net loss per common share, basic and diluted		<u>13,020,525</u>

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See accompanying notes to the unaudited interim condensed consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Condensed Consolidated Statements of Comprehensive Loss**  
**(Unaudited)**  
(In thousands)

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	THREE MONTHS ENDED	
	MARCH 31,	
	2017	2018
Net loss	\$ (2,257)	\$ (4,947)
Other comprehensive (loss) income, net of tax:		
Foreign currency translation adjustments	(2)	(23)
Total other comprehensive (loss) income, net of tax	(2)	(23)
Comprehensive loss	<u>\$ (2,259)</u>	<u>\$ (4,970)</u>

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See accompanying notes to the unaudited interim condensed consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**  
**Condensed Consolidated Statements of Cash Flows**  
**(Unaudited)**  
(In thousands)

	THREE MONTHS ENDED MARCH 31,	
	2017	2018
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (2,257)	\$ (4,947)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	44	87
Stock-based compensation	38	126
Loss on disposal of property and equipment	—	97
Changes in operating assets and liabilities:		
Prepaid expenses	(38)	(581)
Other current assets	(343)	(60)
Other assets	—	39
Accounts payable	435	156
Accrued liabilities	104	872
Other liabilities, current	2	149
Deferred rent	3	296
Net cash used in operating activities	<u>(2,012)</u>	<u>(3,766)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchase of property and equipment	—	(195)
Net cash used in investing activities	<u>—</u>	<u>(195)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from exercises of stock options	—	25
Net cash provided by financing activities	<u>—</u>	<u>25</u>
Effect of exchange rate changes on cash and cash equivalents and restricted cash	—	(12)
Net decrease in cash and cash equivalents and restricted cash	(2,012)	(3,948)
Cash and cash equivalents and restricted cash at beginning of period	9,760	51,046
Cash and cash equivalents and restricted cash at end of period	<u>\$ 7,748</u>	<u>\$ 47,098</u>
<b>SUPPLEMENTAL DISCLOSURES OF NONCASH FINANCING ITEMS:</b>		
Reclassification of employee stock liability to equity upon vesting	\$ 10	\$ 17
Addition of tenant improvement paid for by landlord	\$ —	\$ 2,054
Purchase of property and equipment in accounts payable and accrued expenses	\$ —	\$ 21
Deferred offering costs in accrued liabilities	\$ —	\$ 1,300

See accompanying notes to the unaudited interim condensed consolidated financial statements

**KEZAR LIFE SCIENCES, INC.**

**Notes to Unaudited Condensed Consolidated Financial Statements**

**1. Organization and Description of the Business**

***Description of Business***

Kezar Life Sciences, Inc. (the Company) was incorporated in Delaware on February 19, 2015, and commenced operations in June 2015. The Company is a clinical-stage biotechnology company, discovering and developing novel small molecule therapeutics to treat unmet needs in autoimmunity and cancer. The Company's lead product candidate, KZR-616, a first-in-class selective immunoproteasome inhibitor, has completed testing in healthy volunteers and is now enrolling a Phase 1b/2 clinical trial in lupus and lupus nephritis. The Company is also leveraging its protein secretion pathway platform to discover and develop small molecule therapies targeting cancer and immuno-oncology. To date, the Company's primary activities have been related to the establishment of its facilities, recruitment of personnel and conducting development of its product candidates, including clinical trials. The Company's principal operations are in South San Francisco, California, and it operates in one segment.

***Liquidity***

Since commencing operations in mid-2015, substantially all of the Company's efforts have been focused on research, development, and the advancement of the Company's lead product candidate, KZR-616. The Company's ultimate success depends on the outcome of the ongoing research and development activities. The Company has not yet generated product sales and as a result has experienced operating losses since inception and had an accumulated deficit of \$30.9 million as of March 31, 2018. The Company expects to incur additional losses in the future to conduct research and development and will need to raise additional capital to fully implement management's business plan. The Company intends to raise such capital through the issuance of additional equity, and potentially through borrowings, strategic alliances with partner companies and other licensing transactions. However, if such financing is not available at adequate levels, the Company may need to reevaluate its operating plans. Management believes that its existing cash and cash equivalents will be sufficient to fund the Company's cash requirements for at least 12 months following the issuance of these financial statements.

**2. Summary of Significant Accounting Policies**

***Basis of Presentation and Consolidation***

The condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (U.S. GAAP) and include the Company's accounts and those of its wholly owned subsidiary. All intercompany balances and transactions have been eliminated upon consolidation.

***Unaudited Interim Condensed Consolidated Financial Statements***

The interim condensed consolidated balance sheet as of March 31, 2018, and the condensed consolidated statements of operations, comprehensive loss, and cash flows for the three months ended March 31, 2017 and 2018 are unaudited. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary for the fair statement of the Company's financial position as of March 31, 2018 and its results of operations and cash flows for the three months ended March 31, 2017 and 2018. The financial data and the other financial information disclosed in these notes to the condensed consolidated financial statements related to the three-month periods are also unaudited. The results of operations for the three months ended March 31, 2018 are not necessarily indicative of the results to be expected for the year ending December 31, 2018, or for any other future annual or interim period. The balance sheet as of December 31, 2017, included herein was derived from the audited consolidated financial statements as of that date. These condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements included elsewhere in this prospectus.

**Use of Estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant items subject to such estimates and assumptions include the useful lives of fixed assets, stock-based compensation, and accrued research and development costs. Management bases its estimates on historical experience and on various other market-specific relevant assumptions that management believes to be reasonable under the circumstances. Actual results may differ from those estimates.

**Unaudited Pro Forma Stockholders' Equity**

The unaudited pro forma stockholders' equity as of March 31, 2018 presents the Company's consolidated stockholders' equity as though all of the Company's outstanding Series A and Series B redeemable convertible preferred stock had converted into 12,263,126 shares of common stock upon either (1) the closing of the sale of shares of common stock to the public at a price of at least \$7.942 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to common stock) in a firm commitment underwritten initial public offering (IPO) resulting in at least \$40.0 million of gross proceeds to the Company or (2) the occurrence of an event, specified by vote or written consent of the holders of at least majority of the outstanding shares of preferred stock and the holders of at least 55% of the outstanding Series B convertible preferred stockholders. The unaudited pro forma consolidated stockholders' equity does not assume any proceeds from the proposed IPO.

**Cash and Cash Equivalents and Restricted Cash**

The Company considers all highly liquid investments with original maturities of three months or less at the time of purchase to be cash equivalents. Cash equivalents consist of highly liquid money market funds.

Restricted cash consists of deposits at the bank held as collateral for the Company's credit card program.

The following tables provides a reconciliation of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the same amounts shown in the consolidated statements of cash flows (in thousands):

---

	<b>March 31,</b>	
	<b>2017</b>	<b>2018</b>
Cash and cash equivalents	\$7,735	\$47,085
Restricted cash	13	13
Total cash, cash equivalents, and restricted cash shown in the statements of cash flows	<u>\$7,748</u>	<u>\$47,098</u>

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**Deferred Offering Costs**

The Company has deferred offering costs consisting of legal, accounting and other fees and costs directly attributable to the Company's planned IPO. 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 deferred offering costs will be expensed within the Company's consolidated statements of operations. As of December 31, 2017, no amounts were deferred. As of March 31, 2018, \$1.3 million of deferred offering costs were recorded within other current assets on the consolidated balance sheet.

**Research and Development Costs**

Research and development costs are expensed as incurred and consist primarily of salaries and benefits, stock-based compensation expense, lab supplies and facility costs, as well as fees paid to nonemployees and entities that conduct certain research and development activities on the Company's behalf and expenses incurred in connection with license agreements. Nonrefundable advance payments for goods or services to be received in the future for use in research and development activities are capitalized and then expensed as the related goods are delivered or the services are performed.

The Company accrues for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical and clinical studies and contract manufacturing activities. The

## [Table of Contents](#)

Company estimates the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and the agreed-upon fee to be paid for such services. The Company makes significant judgments and estimates in determining the accrued balance in each reporting period. As actual costs become known, the Company adjusts the accrued estimates. Although the Company does not expect the estimates to be materially different from amounts actually incurred, the status and timing of services performed, the number of patients enrolled and the rate of patient enrollment may vary from the Company's estimates and could result in the Company reporting amounts that are too high or too low in any particular period. The Company's accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. For the periods presented, there have been no material differences from the Company's accrued expenses to actual expenses.

### **Research and Development Tax Incentive**

The Company is eligible under the AusIndustry Research and Tax Development Tax Incentive Program to obtain a cash amount from the Australian Taxation Office (ATO). The tax incentive is available to the Company on the basis of specific criteria with which the Company must comply related to research and development expenditures in Australia. These research and development tax incentives are recognized as contra research and development expense when the right to receive has been attained and funds are considered to be collectible.

The Company recognized \$274,000 and \$3,000 as a reduction of research and development expenses for the three months ended March 31, 2017 and March 31, 2018, respectively, in connection with the research and development tax incentive from the ATO. As of December 31, 2017, and March 31, 2018, the research and development tax credit receivable was \$498,000 and \$490,000, respectively, which is included in other current assets in the condensed consolidated balance sheets.

### **Unaudited Pro Forma Net Loss per Share**

Unaudited pro forma basic and diluted net loss per share has been computed to give effect to the conversion of the redeemable convertible preferred stock into common stock as if such conversion had occurred at the earlier of the beginning of the period or the date of issuance, if later. The unaudited pro forma net loss per share does not include the shares expected to be sold and related proceeds to be received from the IPO.

### **Recently Issued Accounting Pronouncements**

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, "Leases." ASU 2016-02 increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and requires disclosing key information about leasing arrangements. ASU 2016-02 is effective, the earlier of January 1, 2019, if the Company becomes a public entity, or for annual periods beginning after December 15, 2019. Management does not expect the adoption of ASU 2016-02 to have a material effect on its business. The Company is currently evaluating the effect the update will have on its financial statements and related disclosures.

## **3. Balance Sheet Components**

### **Property and Equipment, Net**

Property and equipment consists of the following (in thousands):

	DECEMBER 31, 2017	MARCH 31, 2018
Leasehold improvements	\$ 155	\$ 2,518
Furniture, laboratory and office equipment	1,242	1,283
Computer equipment	34	134
Construction in progress	464	35
Total property and equipment	1,895	3,970
Less accumulated depreciation and amortization	(355)	(353)
Property and equipment, net	<u>\$ 1,540</u>	<u>\$ 3,617</u>

## [Table of Contents](#)

Under the terms of its lease for office and laboratory space at 4000 Shoreline Court, South San Francisco, the Company received an incentive from the landlord for \$2.5 million to construct leasehold improvements, which have been recorded in fixed assets and other liabilities. During the three months ended March 31, 2018, the Company disposed of leasehold improvements, laboratory equipment and office equipment resulting in a loss of \$97,000. There was no such loss during the three months ended March 31, 2017.

### **Accrued Liabilities**

Accrued liabilities consisted of the following (in thousands):

	DECEMBER 31, 2017	MARCH 31, 2018
Deferred offering costs	\$ —	\$ 1,300
Accrued preclinical and research costs	108	853
Accrued clinical costs	340	419
Accrued employee-related costs	422	376
Accrued professional services	—	335
Other	41	148
Accrued liabilities	<u>\$ 911</u>	<u>\$ 3,431</u>

## **4. Stock-Based Compensation**

### **Stock Option Activity**

The following table summarizes activity under the Company's stock option plan and related information (in thousands, except share and per share amounts):

	OPTIONS AVAILABLE TO GRANT	NUMBER OF OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE	WEIGHTED AVERAGE REMAINING CONTRACTUAL TERM	AGGREGATE INTRINSIC VALUE
Outstanding at December 31, 2017	1,322,628	1,213,010	\$ 1.54	8.7	\$ 999
Granted	(251,773)	251,773	\$ 2.37		
Exercised	—	(109,818)	\$ 1.73		\$ 70
Outstanding at March 31, 2018	<u>1,070,855</u>	<u>1,354,965</u>	\$ 1.68	7.7	\$ 929
Vested and exercisable at March 31, 2018		<u>541,990</u>	\$ 0.99	7.8	\$ 745

The weighted average grant date fair value of options granted during the three months ended March 31, 2017 and 2018 was \$1.00 and \$1.68 per share, respectively. The 2015 Plan allows for early exercisable option grants, which permit the grantee to exercise a stock option in exchange for stock before the requisite service is provided (e.g., before the award is vested under its original terms); however, such arrangements permit the Company to subsequently repurchase such shares at the exercise price if the vesting conditions are not satisfied. To date, the Company has made such grants only to non-employee board members. The total intrinsic value of exercised stock options during the three months ended March 31, 2017 and 2018 was \$0 and \$70,000, respectively. The aggregate intrinsic value is calculated as the difference between the exercise price and the estimated fair value of the Company's common stock at the date of exercise.



**Stock-Based Compensation Expense**

Total stock-based compensation recognized by function was as follows (in thousands):

	THREE MONTHS ENDED MARCH 31,	
	2017	2018
General and administrative	\$ 21	\$ 67
Research and development	17	59
Total stock-based compensation expense	<u>\$ 38</u>	<u>\$ 126</u>

As of March 31, 2018, the unrecognized stock-based compensation cost and the estimated weighted average amortization period, using the straight-line attribution method, was as follows (dollars in thousands):

	UNRECOGNIZED COMPENSATION COST	WEIGHTED AVERAGE REMAINING AMORTIZATION PERIOD (YEARS)
Employee options	\$ 1,312	3.18
Nonemployee options	4	1.03
Total unrecognized stock-based compensation expense	<u>\$ 1,316</u>	

The fair value of the employee stock options granted is calculated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	THREE MONTHS ENDED MARCH 31,	
	2017	2018
Expected term (years)	6.08	6.04
Expected volatility	82.53%	81.99%
Risk-free interest rate	2.10%	2.62%
Expected dividend yield	—%	—%

**Early Exercise Stock Purchase Agreements**

As of December 31, 2017 and March 31, 2018, there were 45,224 and 111,178, respectively, of nonvested common shares outstanding that were exercised early and subject to repurchase by the Company at the original issuance price upon termination of the stockholder's services. The right to repurchase these shares generally lapses with respect to 25% of the shares underlying the option after the applicable vesting commencement date and 1/48 of the shares underlying the original grant per month for 36 months thereafter. The shares purchased pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be issued until those shares vest. The cash received in exchange for exercised and nonvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the balance sheets with the corresponding par value in common stock and an offset in additional paid-in capital. As of December 31, 2017 and March 31, 2018, the Company recorded in other current liabilities \$18,000 and \$164,000, respectively, associated with shares issued upon the early exercise of stock options that are subject to repurchase.

[Table of Contents](#)**Restricted Stock**

In addition to the nonvested common shares outstanding described above at "Early Exercise Stock Purchase Agreements," the Company issued restricted stock to its founders. The fair value of restricted stock on the issuance date is deemed equal to the cash consideration paid by the founders. Restricted stock vests over a four-year period from the applicable vesting commencement date. The following summarizes the activity of nonvested restricted stock:

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	<u>NUMBER OF SHARES</u>
Nonvested—December 31, 2017	193,394
Vested	<u>(52,269)</u>
Nonvested—March 31, 2018	<u>141,125</u>

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**5. Net Loss Per Share and Pro Forma Net Loss Per Share****Net Loss Per Share**

The following table sets forth the calculation of basic and diluted net loss per share during the periods presented (in thousands, except share and per share data):

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	<u>THREE MONTHS ENDED</u> <u>MARCH 31,</u>	
	<u>2017</u>	<u>2018</u>
<b>Numerator:</b>		
Net loss	<u>\$ (2,257)</u>	<u>\$ (4,947)</u>
<b>Denominator:</b>		
Weighted-average shares of common stock outstanding	<u>509,143</u>	<u>757,399</u>
Net loss per share, basic and diluted	<u>\$ (4.43)</u>	<u>\$ (6.53)</u>

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The following outstanding shares of common stock equivalents were excluded from the computation of the diluted net loss per share for the periods presented because their effect would have been anti-dilutive:

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	<u>THREE MONTHS ENDED</u> <u>MARCH 31,</u>	
	<u>2017</u>	<u>2018</u>
Redeemable convertible preferred stock on an if converted basis	<u>5,966,753</u>	<u>12,263,126</u>
Stock options to purchase common stock	<u>734,663</u>	<u>1,354,965</u>
Common stock subject to future vesting	<u>416,477</u>	<u>252,303</u>
Total	<u>7,117,893</u>	<u>13,870,394</u>

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**Unaudited Pro Forma Net Loss Per Share**

Unaudited pro forma net loss per share was computed to give effect to the conversion of all shares of redeemable convertible preferred stock using the if converted method as though the conversion had occurred as of the beginning of the period or the date of issuance, if later.

## [Table of Contents](#)

The following table sets forth the computation of the unaudited pro forma net loss per share (in thousands, except share and per share amounts):

	THREE MONTHS ENDED MARCH 31, 2018
<b>Numerator:</b>	
Net loss	\$ (4,947)
<b>Denominator:</b>	
Weighted-average shares of common stock used in computing net loss per share	757,399
Weighted-average pro forma adjustment to reflect assumed conversion of redeemable convertible preferred stock	12,263,126
Weighted-average shares of common stock used in computing pro forma net loss per share	13,020,525
Pro forma net loss per share, basic and diluted	\$ (0.38)

## 6. Income Taxes

For the three months ended March 31, 2017 and 2018, the Company did not record an income tax provision. The U.S. federal deferred tax assets generated from the Company's net operating losses have been fully reserved, as the Company believes it is not more likely than not that the benefit will be realized. The Tax Cuts and Jobs Act of 2017 (the "Tax Act") contains tax law changes that are effective in tax years 2018 and onward. The Company believes that these changes may alter the amount of tax loss generated, but does not believe that the changes will create a tax liability in 2018. The Company has also not yet made a policy election with respect to its treatment of potential global intangible low-taxed-income ("GILTI"). Companies can either account for taxes on GILTI as incurred or recognized deferred taxes when basis differences exist that are expected to affect the amount of the GILTI inclusion upon reversal. The Company is still in the process of analyzing the provisions of the Tax Act associated with GILTI and the expected impact of GILTI on the Company in the future.

## 7. Related Party Disclosure

### *Consulting Agreement with Michael Kauffman*

On April 1, 2017, the Company entered into a consulting agreement with Michael Kauffman, a member of its board of directors. This agreement provides that Dr. Kauffman shall provide clinical and scientific advisory services and participate on our board of directors in exchange for a monthly fee of \$3,000, payable on the first of the month. The consulting agreement will terminate upon the effectiveness of the Company's registration statement on Form S-1 in connection with the Company's IPO. For the three months ended March 31, 2018, the Company recognized \$9,000 as consulting expense for the agreement.

## 8. Subsequent Events

### *Stock Options*

In April 2018, the Company granted 784,507 options to purchase its common stock at an exercise price of \$5.91 per share.

### *Reverse Stock Split*

On June 8, 2018, the Company filed an Amended and Restated Certificate of Incorporation effecting a 1-for-5.62 reverse stock split of its issued and outstanding common stock and redeemable convertible preferred stock. The par value of the authorized stock was not adjusted as a result of the reverse stock split. In connection with the reverse stock split, the filed Amended and Restated Certificate of Incorporation also adjusted the minimum price per share required in a firm-commitment underwritten public offering of the Company's common stock in order for the preferred stock to automatically convert to common stock. The minimum price post-split was \$15.884 and has been adjusted to now be \$7.942. The Company did not adjust the number of authorized shares of common stock or

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[Table of Contents](#)

redeemable convertible preferred stock. Other than the par value and the number of authorized shares of common stock, all share and per share data shown in the accompanying consolidated financial statements and related notes have been retroactively revised to reflect the reverse stock split.

**4,666,667 Shares**



## **Common Stock**

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**PRELIMINARY PROSPECTUS**

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*Lead Book-Running Managers*

**Jefferies  
Cowen**

*Joint Book-Running Managers*

**Wells Fargo Securities  
William Blair**

**, 2018**

Through and including \_\_\_\_\_, 2018 (the 25th day after the commencement of this offering), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

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**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of our common stock being registered. All amounts are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, or FINRA, filing fee and The Nasdaq Global Market, or Nasdaq, listing fee.

<b>ITEM</b>	<b>AMOUNT</b>
SEC registration fee	\$ 10,691
FINRA filing fee	13,380
Nasdaq listing fee	125,000
Printing expenses	700,000
Legal fees and expenses	1,515,000
Accounting fees and expenses	1,010,000
Transfer agent fees and expenses	10,000
Miscellaneous expenses	415,929
Total	<u>\$ 3,800,000</u>

**Item 14. Indemnification of Directors and Officers.**

As permitted by Section 102 of the Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws provide that:

- we may indemnify our directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;
- we may advance expenses to our directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in our bylaws are not exclusive.

Our amended and restated certificate of incorporation, attached as Exhibit 3.1, and our amended and restated bylaws, attached as Exhibit 3.3, provide for the indemnification provisions described above and elsewhere herein. We have entered or will enter into, and intend to continue to enter, into separate indemnification agreements with our directors and officers that may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require us, among other things, to indemnify

## [Table of Contents](#)

our officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

The Registrant has purchased and currently intends to maintain insurance on behalf of each and every person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The form of Underwriting Agreement, to be attached as Exhibit 1.1 hereto, provides for indemnification by the underwriters of us and our officers and directors who sign this Registration Statement for specified liabilities, including matters arising under the Securities Act.

### **Item 15. Recent Sales of Unregistered Securities.**

The following list sets forth information as to all securities we have sold since February 19, 2015 (date of inception) up to the date of the prospectus that is a part of this registration statement:

- (1) We granted options to purchase an aggregate of 2,361,571 shares of common stock, with exercise prices ranging from \$0.90 to \$5.91 per share, to employees, directors and consultants pursuant to our 2015 Equity Incentive Plan, as amended, or 2015 Plan.
- (2) We issued 248,609 shares of common stock to certain of our directors and employees pursuant to the exercise of stock options under our 2015 Plan for an aggregate purchase price of \$314,008.
- (3) In April 2015, we issued an aggregate of 836,297 shares of common stock to our President and Chief Scientific Officer, our Chief Executive Officer and our co-founder at a price per share of \$0.00562 for an aggregate purchase price of \$4,700.
- (4) In June 2015, we issued and sold an aggregate of 5,966,753 shares of our Series A redeemable convertible preferred stock to 50 accredited investors in exchange for cash and to Onyx Therapeutics, Inc., or Onyx, as consideration for entry into that certain Exclusive License Agreement, dated as of June 11, 2015, by and between us and Onyx, at a price per share of \$4.755 for an aggregate purchase price of \$23.0 million.
- (5) In June and July 2017, we issued and sold an aggregate of 6,296,373 shares of our Series B redeemable convertible preferred stock to 24 accredited investors at a price per share of \$7.942 for an aggregate purchase price of \$50.0 million.

The offers, sales and issuances of the securities described in paragraphs (3) through (5) above were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act and Rule 506 promulgated under Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about the Registrant. No underwriters were involved in these transactions.

The offers, sales and issuances of the securities described in paragraphs (1) and (2) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were employees, directors or bona fide consultants of the Registrant and received the securities under the 2015 Plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about the Registrant.

## Table of Contents

### **Item 16. Exhibits and Financial Statement Schedules.**

(a) Exhibits.

The exhibits listed below are filed as part of this registration statement.

<u>EXHIBIT NUMBER</u>	<u>DESCRIPTION</u>
1.1#	<a href="#"><u>Form of Underwriting Agreement.</u></a>
3.1	<a href="#"><u>Amended and Restated Certificate of Incorporation, as currently in effect.</u></a>
3.2#	<a href="#"><u>Form of Amended and Restated Certificate of Incorporation, to be effective immediately after to the completion of this offering.</u></a>
3.3#	<a href="#"><u>Amended and Restated Bylaws, as currently in effect.</u></a>
3.4#	<a href="#"><u>Form of Amended and Restated Bylaws, to be effective immediately prior to the completion of this offering.</u></a>
4.1#	<a href="#"><u>Form of Common Stock Certificate of the Registrant.</u></a>
4.2#	<a href="#"><u>Amended and Restated Investors' Rights Agreement, by and among the Registrant and certain of its stockholders, dated June 26, 2017.</u></a>
5.1#	<a href="#"><u>Opinion of Cooley LLP.</u></a>
10.1+#	<a href="#"><u>Form of Indemnity Agreement by and between the Registrant and its directors and officers.</u></a>
10.2+#	<a href="#"><u>2018 Equity Incentive Plan.</u></a>
10.3+#	<a href="#"><u>Forms of Option Grant Notice and Option Agreement under 2018 Equity Incentive Plan.</u></a>
10.4+#	<a href="#"><u>Form of Restricted Stock Unit Grant Notice and Unit Award Agreement under 2018 Equity Incentive Plan.</u></a>
10.5+#	<a href="#"><u>2015 Equity Incentive Plan, as amended.</u></a>
10.6+#	<a href="#"><u>Form of Stock Option Agreement under the 2015 Equity Incentive Plan.</u></a>
10.7+#	<a href="#"><u>Form of Stock Option Agreement—Early Exercise under the 2015 Equity Incentive Plan.</u></a>
10.8+#	<a href="#"><u>2018 Employee Stock Purchase Plan.</u></a>
10.9+#	<a href="#"><u>Amended and Restated Executive Employment Agreement between the Registrant and John Fowler, dated June 7, 2018.</u></a>
10.10+#	<a href="#"><u>Amended and Restated Executive Employment Agreement between the Registrant and Christopher J. Kirk, dated June 7, 2018.</u></a>
10.11†#	<a href="#"><u>Exclusive License Agreement by and between the Registrant and Onyx Therapeutics, Inc., dated June 11, 2015.</u></a>
10.12#	<a href="#"><u>Lease between the Registrant and AP3-SF1 4000 Shoreline, LLC, dated August 16, 2017.</u></a>
21.1#	<a href="#"><u>Subsidiaries of the Registrant.</u></a>
23.1	<a href="#"><u>Consent of KPMG LLP, an Independent Registered Public Accounting Firm.</u></a>
23.2#	<a href="#"><u>Consent of Cooley LLP (included in Exhibit 5.1).</u></a>
24.1#	<a href="#"><u>Power of Attorney (included on the signature page to this registration statement).</u></a>

+ Indicates a management contract or compensatory plan.

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment filed with the Securities and Exchange Commission.

# Previously filed.



## [Table of Contents](#)

(b) Financial Statement Schedules.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

### **Item 17. Undertakings.**

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this amendment to the Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on June 11, 2018.

**KEZAR LIFE SCIENCES, INC.**

By: /s/ John Fowler  
John Fowler  
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this amendment to the registration statement on Form S-1 has been signed by the following persons in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ John Fowler</u> John Fowler	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	June 11, 2018
<u>/s/ Marc L. Belsky</u> Marc L. Belsky	Chief Financial Officer and Secretary <i>(Principal Financial and Accounting Officer)</i>	June 11, 2018
<u>*</u> Christopher Kirk, Ph.D.	President, Chief Scientific Officer and Director	June 11, 2018
<u>*</u> Jean-Pierre Sommadossi, Ph.D.	Director	June 11, 2018
<u>*</u> Franklin M. Berger, CFA	Director	June 11, 2018
<u>*</u> Bihua Chen	Director	June 11, 2018
<u>*</u> Graham Cooper	Director	June 11, 2018
<u>*</u> Jason Dinges, Ph.D., J.D.	Director	June 11, 2018
<u>*</u> Michael Kauffman, M.D., Ph.D.	Director	June 11, 2018

\*By: /s/ Marc L. Belsky  
Marc L. Belsky  
Attorney-in-fact

**FIFTH AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
KEZAR LIFE SCIENCES, INC.**

(Pursuant to Sections 242 and 245 of the  
General Corporation Law of the State of Delaware)

Kezar Life Sciences, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

**DOES HEREBY CERTIFY:**

**1.** That the name of this corporation is Kezar Life Sciences, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on February 19, 2015 under the name Kezar Life Sciences, Inc.

**2.** That the board of directors of the corporation (the “**Board**”) duly adopted resolutions proposing to amend and restate the Fourth Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

**RESOLVED**, that the Fourth Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

**FIRST:** The name of this corporation is Kezar Life Sciences, Inc. (the “**Corporation**”).

**SECOND:** The address of the registered office of the Corporation in the State of Delaware is Corporation Service Company, 251 Little Falls Drive, City of Wilmington, County of New Castle, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

**THIRD:** The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

**FOURTH:** Effective upon the filing of this Amended and Restated Certificate of Incorporation, (i) every 5.62 issued and outstanding shares of Common Stock automatically and without any action on the part of the respective holders thereof, shall be changed, reclassified and combined into and shall constitute one (1) fully paid and nonassessable share of Common Stock and (ii) every 5.62 issued and outstanding shares of Preferred Stock automatically and without any action on the part of the respective holders thereof, shall be changed, reclassified and combined into and shall constitute one (1) fully paid and nonassessable share of the same series of Preferred Stock (together, the “**Reverse Stock Split**”); provided further, that if the Reverse Stock Split would result in any fractional share, the Corporation shall, in lieu of issuing

any such fractional share, pay the holder thereof an amount in cash equal to the fair market value of such fractional share on the effective date of the Reverse Stock Split as determined by the Corporation's board of directors. The Reverse Stock Split shall occur whether or not the certificates representing such shares of Common Stock or Preferred Stock are surrendered to the Corporation or its transfer agent; provided, however, that the Corporation shall not be obligated to issue certificates evidencing the shares resulting from the Reverse Stock Split unless either the certificates evidencing such shares of Common Stock or Preferred Stock are delivered to the Corporation or its transfer agent, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. Notwithstanding the foregoing, the par value of each share of the Corporation's outstanding Common Stock and Preferred Stock will not be adjusted in connection with the Reverse Stock Split. All share amounts, dollar amounts and other provisions in this Amended and Restated Certificate of Incorporation have been appropriately adjusted to reflect the Reverse Stock Split, and no further adjustments shall be made to the share amounts, dollar amounts, conversion prices and other provisions, except in the case of any stock splits, reverse splits, recapitalization and the like occurring after the effective time of the Reverse Stock Split.

The total number of shares of all classes of stock which the Corporation shall have authority to issue is 171,533,240, consisting of (i) 96,000,000 shares of Common Stock, \$0.001 par value per share ("**Common Stock**") and (ii) 75,533,240 shares of Preferred Stock, \$0.001 par value per share ("**Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

#### A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings). No person entitled to vote at an election for directors may cumulate votes to which such person is entitled, unless, at the time of such election, the Corporation is subject to Section 2115 of the California Corporations Code. During such time or times that the Corporation is subject to Section 2115(b) of the California Corporations Code, every stockholder entitled to vote at an election for directors may cumulate such stockholder's votes and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which such stockholder's shares are otherwise entitled, or distribute the stockholder's votes on the same principle among as many candidates as such stockholder desires. No stockholder, however, shall be entitled to so cumulate such stockholder's votes unless (i) the names of such candidate or candidates have been placed in nomination prior to the voting, and (ii) the stockholder has given notice at the meeting, prior to the voting, of such stockholder's intention to

cumulate such stockholder's votes. If any stockholder has given proper notice to cumulate votes, all stockholders may cumulate their votes for any candidates who have been properly placed in nomination. Under cumulative voting, the candidates receiving the highest number of votes, up to the number of directors to be elected, are elected. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

## B. PREFERRED STOCK

33,533,240 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A Preferred Stock**" and 42,000,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**," The rights, preferences, powers, privileges and restrictions, qualifications and limitations of the Preferred Stock are as set forth below in this Part B of Article Fourth. Unless otherwise indicated, references to "sections" or "subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

### 1. Dividends.

Holders of Series A Preferred Stock shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of \$0.383 per share per annum on such shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) and holders of Series B Preferred Stock shall be entitled to receive, but only out of funds that are legally available therefor, cash dividends at the rate of \$0.636 per share per annum on such shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock) (the "**Dividends**"). The Dividends shall be non-cumulative and payable only when, as, and if declared by the Board, and the Corporation shall otherwise be under no obligation to pay such Dividends. No right to dividends shall accrue to holders of Series A Preferred Stock by reason of the fact that dividends on said shares are not declared or paid. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Preferred Stock, in each case calculated on the record date for determination of holders

entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Original Issue Price (as defined below); provided that if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The “**Original Issue Price**” shall mean \$4.755 per share, with respect to the Series A Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock occurring after the effective time of the Reverse Stock Split (the “**Series A Original Issue Price**”) and shall mean \$7.942 per share, with respect to the Series B Preferred Stock, subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock occurring after the effective time of the Reverse Stock Split (the “**Series B Original Issue Price**”).

2. Liquidation, Dissolution or Winding Up: Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Series B Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of Series A Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) one (1) times the Series B Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series B Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series B Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock the full amount to which they shall be entitled under this Subsection 2.1, the holders of shares of Series B Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

**2.2 Preferential Payments to Holders of Series A Preferred Stock.** In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of the full Series B Liquidation Amount as set forth in Subsection 2.1 above, but before any distribution or payment shall be made to the holders of Common Stock by reason of their ownership thereof, the holders of shares of Series A Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders an amount per share equal to the greater of (i) one (1) times the Series A Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series A Liquidation Amount**,” and each of the Series B Liquidation Amount and the Series A Liquidation Amount are hereinafter referred to as a “**Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled under this Subsection 2.2, the holders of shares of Series A Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

**2.3 Payments to Holders of Common Stock.** In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock as set forth in Subsections 2.1 and 2.2 above, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

**2.4 Deemed Liquidation Events.**

**2.4.1 Definition.** Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of at least a majority of the outstanding shares of Preferred Stock (voting together as a single class on an as-converted basis) and the holders of at least 55% of the outstanding shares of Series B Preferred Stock (voting together as a separate class on an as-converted basis) elect otherwise by written notice sent to the Corporation at least five (5) business days prior to the effective date of any such event:

(a) a merger or consolidation in which

- (i) the Corporation is a constituent party or
- (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or

consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) the sale, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, transfer exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

#### 2.4.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.4.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Subsection 2.4.1(a)(ii) or 2.4.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock and, thereafter to the extent permitted by the General Corporation Law, Common Stock, no later than the ninetieth (90<sup>th</sup>) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Preferred Stock and, to the extent permitted by the General Corporation Law, Common Stock, and (iii) if the holders of at least a majority of the then outstanding shares of Preferred Stock (voting together as a single class on an as-converted basis) so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the “**Available Proceeds**”), on the one hundred fiftieth (150<sup>th</sup>) day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the applicable Liquidation Amount, and, thereafter, to the extent permitted by the General Corporation Law, to redeem all outstanding shares of Common Stock, with any such remaining Available Proceeds allocated ratably among such outstanding shares of Common Stock. Notwithstanding the foregoing, in the event of a



redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem each holder's shares of Series B Preferred Stock to the fullest extent of such Available Proceeds, and to the extent there are any remaining Available Proceeds, the Company shall then ratably redeem each holder's shares of Series A Preferred Stock to the fullest extent of such Available Proceeds, and to the extent there are any remaining Available Proceeds and to the extent permitted by the General Corporation Law, then the Company shall then ratably redeem each holder's shares of Common Stock to the fullest extent of such Available Proceeds. The Corporation shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. The Corporation shall send written notice of the redemption of the Preferred Stock and, if applicable, Common Stock pursuant to this Subsection 2.4.2(b) (the "**Redemption Notice**") to each holder of Preferred Stock and Common Stock not less than forty (40) days prior to the date of such redemption (the "**Redemption Date**"). Each Redemption Notice shall state (i) the number of shares of Preferred Stock and Common Stock held by the holder that the Corporation shall redeem on the Redemption Date specified in the Redemption Notice; (ii) the Redemption Date and the applicable Liquidation Amount; (iii) the date upon which the holder's right to convert such shares terminates (as determined in accordance with Subsection 4.1); and (iv) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock and Common Stock to be redeemed. On or before the applicable Redemption Date, each holder of shares of Preferred Stock and holder of shares of Common Stock to be redeemed on such Redemption Date, unless (if applicable) such holder has exercised his, her or its right to convert such shares as provided in Section 4, shall, if a holder of shares in certificated form, surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Liquidation Amount for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof. If the Redemption Notice shall have been duly given, and if on the applicable Redemption Date the Liquidation Amount payable upon redemption of the shares of Preferred Stock to be redeemed on such Redemption Date is paid or tendered for payment or deposited with an independent payment agent so as to be available therefor in a timely manner, then notwithstanding that any certificates evidencing any of the shares of Preferred Stock so called for redemption shall not have been surrendered, dividends with respect to such shares of Preferred Stock shall cease to accrue after such Redemption Date and all rights with respect to such shares shall forthwith after the Redemption Date terminate, except only the right of the holders to receive the Liquidation Amount without interest upon surrender of any such certificate or certificates therefor. Prior to the distribution or redemption provided for in this Subsection 2.4.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

**2.4.3 Amount Deemed Paid or Distributed.** If the amount deemed paid or distributed under this Subsection 2.4.3 is made in property other than in cash, the value of such distribution shall be the fair market value of such property, determined as follows:

- (a) For securities not subject to investment letters or other similar restrictions on free marketability,
- (i) if traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange or market over the thirty (30) day period ending three (3) days prior to the closing of such transaction;
  - (ii) if actively traded over-the-counter, the value shall be deemed to be the average of the closing bid prices over the thirty (30) day period ending three (3) days prior to the closing of such transaction; or
  - (iii) if there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board; provided, however, that if holders of at least a majority of the outstanding shares of Preferred Stock object to the value determined by the Board then the value shall be the fair market value mutually agreed upon by the Corporation and the holders of at least a majority of the outstanding shares of Preferred Stock; provided, further that if the Corporation and the holders of at least a majority of the outstanding shares of Preferred Stock are unable to reach an agreement regarding the value, then the fair market value shall be determined by an independent appraiser mutually agreed upon by the parties.

(b) The method of valuation of securities subject to investment letters or other similar restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall take into account an appropriate discount (as determined in good faith by the Board) from the market value as determined pursuant to clause (a) above so as to reflect the approximate fair market value thereof.

**2.4.4 Allocation of Escrow and Contingent Consideration.** In the event of a Deemed Liquidation Event pursuant to Subsection 2.4.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Subsection 2.4.4, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

### 3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Series A Director**”), the holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Series B Director**”), the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect two (2) directors of the Corporation and the holders of record of the shares of Common Stock and Preferred Stock, together as a single class on an as-converted basis, shall be entitled to elect three (3) directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series A Preferred Stock, Series B Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series A Preferred Stock, Series B Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

**3.3 Preferred Stock Protective Provisions.** At any time when shares of Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Preferred Stock, including the holders of at least 55% of the then outstanding shares of Series B Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 take any action (including by amendment, alteration or repeal of any provision of the Certificate of Incorporation or Bylaws of the Corporation) that adversely affects the powers, preferences or rights of any series of Preferred Stock;

3.3.3 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock, unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends, rights of redemption and voting rights;

3.3.4 increase or decrease the authorized number of shares of Common Stock or Preferred Stock or any series of Preferred Stock;

3.3.5 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) redemptions of or dividends or distributions on the Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof;

3.3.6 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.7 increase or decrease the authorized number of directors constituting the Board; or

3.3.8 issue any shares of Common Stock or options to purchase Common Stock, except for (i) Common Stock or options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board and (ii) Exempted Securities (as defined below).

#### 4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

##### 4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the applicable Original Issue Price for such series by the applicable Conversion Price (as defined below) for such series in effect at the time of conversion. The “**Conversion Price**” for each series of Preferred Stock shall initially be equal to the applicable Original Issue Price for such series of Preferred Stock. Such initial Conversion Price, and the rate at which shares of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

##### 4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation’s transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation

serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Conversion Price of a series of Preferred Stock below the then par value of the shares of Common Stock issuable upon conversion of such series of Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price of a series of Preferred Stock shall be made for any declared but unpaid dividends on the shares of such series of Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

#### 4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

- (a) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.
- (b) “**Series A Original Issue Date**” shall mean the date on which the first share of Series A Preferred Stock was issued.
- (c) “**Series B Original Issue Date**” shall mean the date on which the first share of Series B Preferred Stock was issued.
- (d) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(e) “**Additional Shares of Common Stock**” shall mean all shares of Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series B Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, “**Exempted Securities**”):

- (i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;
- (ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8;
- (iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board;
- (iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;
- (v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board including the Series A Director and the Series B Director;
- (vi) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board including the Series A Director and the Series B Director;



(vii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board including the Series A Director and the Series B Director; or

(viii) shares of Common Stock issued in a Qualified Public Offering (as defined below).

4.4.2 No Adjustment of Conversion Price. No adjustment in the Conversion Price for any series of Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least a majority of the then outstanding shares of Preferred Stock (voting together as a single class on an as-converted basis) agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series B Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Conversion Price computed upon the original issue of such

Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4 (either because the consideration per share (determined pursuant to Subsection 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised after the Series B Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, the Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange,

cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Conversion Price applicable to a series of Preferred Stock in effect immediately prior to such issue, then the Conversion Price for such series shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-tenth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 \times (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

- (a) "CP<sub>2</sub>" shall mean the Conversion Price in effect immediately after such issue of Additional Shares of Common Stock
- (b) "CP<sub>1</sub>" shall mean the Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (c) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (d) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP<sub>1</sub> (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP<sub>1</sub>); and
- (e) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Subsection 4.4, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

- (a) Cash and Property: Such consideration shall:

- (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

- (i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon

the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price pursuant to the terms of Subsection 4.4.4, then, upon the final such issuance, the Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series B Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series B Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.4, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not a series of Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of such series of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of such series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price of a series of Preferred Stock pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of such series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which such series of Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the applicable Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of such Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

## 5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least \$7.942 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public

offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$40,000,000 of gross proceeds to the Corporation (a “**Qualified IPO**”), or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the then outstanding shares of Preferred Stock (voting together as a single class on an as-converted basis) and the holders of at least 55% of the then outstanding shares of Series B Preferred Stock (voting together as a separate class on an as-converted basis) at the time of such vote or consent (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Mandatory Conversion Time**”), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Subsection 4.1.1, and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.



6. Redeemed or Otherwise Acquired Shares. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

7. Waiver. Any of the rights, powers, preferences and other terms applicable to all series of Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Preferred Stock then outstanding (voting together as a single class on an as-converted basis); provided, however, that all of the rights, powers, preferences and other terms applicable to only the Series A Preferred Stock set forth herein may be waived on behalf of all holders of Series A Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series A Preferred Stock then outstanding; provided, further, that all of the rights, powers, preferences and other terms applicable to only the Series B Preferred Stock set forth herein may be waived on behalf of all holders of Series B Preferred Stock by the affirmative written consent or vote of the holders of at least a majority of the shares of Series B Preferred Stock then outstanding.

8. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

**FIFTH:** Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

**SIXTH:** Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

**SEVENTH:** Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

**EIGHTH:** Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board or in the Bylaws of the Corporation.

**NINTH:** To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

**TENTH:** To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

**ELEVENTH:** Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

**TWELFTH:** For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Certificate of Incorporation from employees, officers, directors or consultants of the Company in connection with a termination of employment or services

pursuant to agreements or arrangements approved by the Board (in addition to any other consent required under this Certificate of Incorporation), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined therein) shall be deemed to be zero (0).

\* \* \*

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Fifth Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Fourth Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

**IN WITNESS WHEREOF**, this Fifth Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 8th day of June, 2018.

By: /s/ John Fowler

John F. Fowler

Chief Executive Officer and Secretary

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Kezar Life Sciences, Inc.:

We consent to the use of our report included herein and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ KPMG LLP

San Francisco, California  
March 16, 2018, except as to note 14, which is as of June 11, 2018